



AN EVALUATION OF THE RISK MANAGEMENT AND PROPERTY INSURANCE
PRACTICES OF SELECTED PRIVATE COLLEGES AND
UNIVERSITIES IN TENNESSEE

A Dissertation

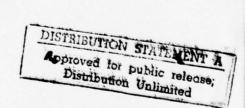
Presented for the

Doctor of Education

Degree

The University of Tennessee, Knoxville

Bob Paul Lilly
June 1977



AD NO.

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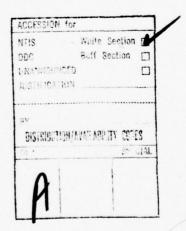
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### ACKNOWLEDGEMENTS

The writer wishes to express sincere appreciation to Dr. Dewey H. Stollar, chairman of the writer's doctoral committee, for his wise counsel, encouragement and scholarly guidance throughout the study. Appreciation is also expressed to Dr. William H. Coffield, Dr. D. Michael Betz and Dr. George W. Harris, Jr. for their comments and guidance which were crucial to the completion of the study. Special appreciation is extended to Glen W. Stout and Ronald P. Hartman, colleagues and classmates, whose counsel, encouragement and friendship shall long be remembered.

The writer is especially indebted to Elizabeth, his wife, and Stephen, his son, for their encouragement, support, sacrifice and understanding throughout the study.



### ABSTRACT

This study addressed a problem that has become increasingly acute in Tennessee's private colleges and universities in recent years: that of providing insurance coverage for educational facilities and contents at a reasonable cost. The purpose of the study was to evaluate the risk management and property insurance practices of those institutions and to recommend improved practices that might significantly reduce the cost of coverage.

The study included: an examination of related literature with a review of state laws pertaining to insurance, a review and summary of selected self-insurance programs, the development of risk management and property insurance criteria, an examination and evaluation of institutional risk management and property insurance practices, an examination of the insured loss versus premium paid ratios, and an evaluation to determine the suitability of the institutions for a self-insurance association.

The scope of the study was delimited to those thirty-seven private colleges and universities in Tennessee which were members of the Tennessee Council of Private Colleges and were accredited by the Southern Association of Colleges and Schools. Data were collected from the institutions by a three-part questionnaire. Responses were received from twenty-eight or 75.7 percent of the institutions.

Significant findings of the study were: institutions met 45.7 percent of the risk management and property insurance criteria; 22.2

percent of the institutions received an adjectival rating of satisfactory based upon percent of criteria met; ten problem areas common to all institutional categories were identified; common forms of property coverage carried were vandalism and malicious mischief (73.1 percent) and builders' risk (57.7 percent); deductibles ranged from zero to \$50,000, with \$100 being the most common; eight of the institutions assumed a deductible equal to or greater than the recommended level; historical data pertaining to property insurance experiences of the institutions were sparse; the insured loss/premium ratio for the period 1972-75 was 329.3 percent; institutions included in the study did not appear to constitute a suitable group for the purpose of self-insurance.

The study's recommendations included: an in-service education program for staff and faculty designed to increase risk management and property insurance awareness; the purchase of insurance coverage through brokers and decreased dependence upon agents; that forms of coverage carried be assessed to assure that all essential coverage is procured; that deductible amounts commensurate with financial capacity be adopted; that favorable loss prevention records be utilized to obtain more preferable rates; that commercial coverage be maintained rather than adopting a self-insurance program; and that the Tennessee Council should form a Risk Management and Insurance Committee to advise on possible solutions to common problems.

The study concluded that risk management and property insurance is an area in which Tennessee's private colleges and universities can

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## CHAPTER I

## THE PROBLEM AND ITS SCOPE

## I. INTRODUCTION

The physical facilities of a college or university represents a significant financial investment as well as a vital tool in the educational program of the institution. The loss of a major academic or support building by fire or other perils could strike a crippling blow to the academic and/or economic stability of the institution. Therefore, the chief administrative officer of an institution of higher education has the responsibility of protecting the facilities of his institution against loss by unexpected or unforeseen perils.

The program of risk management that is developed by the institution must be one which is more effective than just purchasing insurance to cover the risk. The ultimate evaluation of risk management is its success in preventing property loss, while reducing the cost of risk to a minimum. I

One method of treating the risk is simply to assume it. In most instances this action is highly undesirable. Two primary methods of meeting risk, or the uncertainty of financial loss, are: "(1) eliminate or reduce the hazard . . . ; and (2) eliminate or reduce

D. C.: National Association of College and University Business
Officers, 1974), p. 27.

the undesirable financial consequences of hazard or peril."2

There are options available to the institution of higher education when risks have been identified that cannot be eliminated and have not been transferred by contract. Among the options available are: no-insurance, self-insurance, governmental insurance, and commercial insurance coverage. Additionally, there may be various combinations of these options found in some institutions.

The no-insurance alternative is a practice under which the institution treats losses as a part of the operating budget and absorbs these loses on an annual basis. This alternative could be appropriate for a large institution or system which has excellent financial reserves and also has its facilities scattered on different campuses or somewhat dispersed on a single campus. Even the large institution might find itself shouldering a sizeable burden if several of its major facilities were destroyed by a single disaster or by multiple ones within a short period of time.

Self-insurance is a method by which the institution or system assumes those risks normally shifted to an insurance company, by establishing a financial reserve fund upon which it would draw in the event of loss. One of the advantages self-insurance has over no-insurance is that a self-insurance program provides a record of risk

<sup>&</sup>lt;sup>2</sup>C. A. Kulp and John W. Hall, <u>Casualty Insurance</u> (New York: The Ronald Press Company, 1970), p. 7.

<sup>&</sup>lt;sup>3</sup>K. Forbis Jordan, <u>School Business Administration</u> (New York: The Ronald Press Company, 1969), p. 219.

cost that would otherwise be lost. Another advantage self-insurance has over no-insurance is that payments are made to a reserve account, on a periodic basis, to assure that a financial reserve is available in advance of a loss. Caution should be exercised by an institution which desires to change from a conventional insurance program to a self-insurance program. The institution would need to retain commercial insurance coverage on a reduced percentage basis each year until the self-insurance reserve was large enough to provide adequate protection.

Governmental insurance coverage is available in some states to public educational systems. The states which offer governmental insurance programs include: South Carolina, Wisconsin, North Dakota, Alabama, and North Carolina. Additionally, some other states have governmental insurance programs which include only state-owned facilities. These include public higher educational facilities. In order to establish a governmental insurance program, however, the initial reserve is normally established by a state appropriation. A division of state government acts as an insurance agent and regulates the rates that are charged for coverage.

Perhaps the most common approach to risk management by institutions of higher education is commercial insurance. The basic

<sup>&</sup>lt;sup>4</sup>College and University Business Administration, p. 29.

<sup>&</sup>lt;sup>5</sup>Richard Brown, Jr., "Isn't it Time to Turn Insurance Dollars into Instructional Dollars," <u>Journal of Educational Finance</u>, I (Winter, 1976), pp. 393-396.

principle of insurance is the sharing of possible losses by a group, thus lessening the possibility of a complete catastrophe to a single individual. The institution which selects the commercial insurance option must not only pay its share of estimated losses incurred by the group but also it must pay its share of the operating cost of the insurance company. Like any other business, an insurance company is organized to operate on a profit basis. The profit of an insurance company is derived by calculating the difference between the premiums earned plus the income received from invested reserve or surplus funds, and the amount paid to policyholders in the form of claims plus the operating expenses.

Thus, the task of an educational institution is to obtain the needed protection against perils at the lowest possible cost. Educational institutions have available a number of practices which tend to reduce the cost of insurance coverage. Such practices include competitive bids, cooperative purchases, long-term policies, deductibles, purchase of coinsurance, and the reduction or removal of hazards. However, several studies indicate that insurance companies have realized considerable profits on public educational properties insurance. <sup>6</sup>

#### II. STATEMENT OF THE PROBLEM

This study was concerned with the financial problems presently confronting higher education. The ever-increasing cost of delivering

<sup>&</sup>lt;sup>6</sup>Ibid., pp. 391-392.

higher education has outdistanced the methods of funding. Increased tuition, income from endowment investment, and governmental funds have not been able to meet the demands for additional funding. The private institution is more adversely affected than the public institution because it must depend primarily upon tuition, endowment income, and gifts for funding. Many private institutions have been forced to use the principal of their endowment, thus compounding the problem because this procedure reduces the endowment income. Each institution must look at various methods for reducing the cost of operating without adversely affecting the quality of the academic program.

A financial problem which emerged in the late 1960s and early 1970s was a sizeable increase in the cost of insurance coverage due to student militancy on many campuses. Adverse publicity and the lack of accurate premium/loss data caused many insurance companies to consider all educational institutions poor risks and increased the cost of their coverage. Thus, many colleges and universities in Tennessee have been confronted by the requirement to consider their own practices associated with risk management and property insurance. In some cases these private institutions have had to purchase insurance for their buildings and contents on an individual basis at a cost they consider excessive. In some instances improved risk management and property insurance practices might have significantly reduced this cost.

## Purpose of the Study

The purpose of the study was to evaluate the risk management and property insurance practices of selected private colleges and

universities in Tennessee and to recommend improved practices in these areas. Specifically, the study was designed to examine the following questions:

- 1. What were the characteristics and experiences of self-insurance plans in operation that included protection for educational properties?
- 2. What were the risk management and property insurance practices of selected private colleges and universities in Tennessee?
- 3. Were the risk management and property insurance practices of selected private colleges and universities adequate, when evaluated against the criteria established by a panel of nationally recognized experts?
- 4. What were the insured loss versus premium experiences of selected private colleges and universities in Tennessee during the tenyear period 1966-1975?
- 5. What alternative practices appeared appropriate for improving the risk management and property insurance programs of selected private colleges and universities in Tennessee?

### III. BASIC ASSUMPTIONS

The following assumptions were accepted prior to undertaking the study:

1. That the experience of state self-insurance programs in the Southeastern United States would probably closely approximate that of an association of private colleges and universities in Tennessee.

- 2. The data collected by questionnaire from those colleges and universities included in the study represent the most timely and accurate data available.
- 3. The data collected from the period of fiscal years 1966 through 1975 can reasonably be expected to be representative of future years.

### IV. DELIMITATIONS

The study was delimited to:

- Those private colleges and universities in the state of Tennessee which were members of the Tennessee Council of Private Colleges and were accredited by the Southern Association of Colleges and Schools.
- 2. A review and summary of state self-insurance programs in the Southeastern United States.
- 3. Risk management and property insurance practices pertaining to buildings and contents.
- 4. Property insurance data pertaining to the ten-year period of fiscal years 1966 through 1975.

## V. IMPORTANCE OF THE STUDY

An effective program of risk management has commanded a low priority in most colleges and universities because the chances of loss are usually considered relatively remote. The cost of insurance coverage has historically been low, often 0.2 percent or less of the

institutions's operating budget. However, the situation changed considerably during the late 1960s and early 1970s. Property insurance alone, which in the 1930s cost less than 0.1 percent of the annual operating budget, would cost 0.3 percent to 0.5 percent today. 8

Several causes of this increased cost can be identified. The vast increase in the cost of property coverage for institutions of higher education can be traced to several factors such as: student unrest which resulted in property damage; an increase in the physical size of the institution; and the overall inflationary trend in the economy. The insurance companies are probably partially to blame for these increases due to a panic response to student unrest and the lack of accurate loss data for colleges and universities. Although student unrest barely touched New York University, its insurance costs increased from \$65,000 to \$350,000 in just one year. Additionally, the educational institutions are hardly blameless; they have not made the best use of their financial resources; their loss

<sup>&</sup>lt;sup>7</sup>John F. Adams, Risk Management and Insurance: Guidelines for Higher Education (Washington, D. C.: National Association of College and University Business Officers, 1972), p. 6.

<sup>&</sup>lt;sup>8</sup>Ibid., p. 7.

<sup>9&</sup>quot;University Insurance Report 1970," (New York: The Consulting Division of Alexander and Alexander, October, 1970), p. 4. (Mimeographed.)

<sup>10&</sup>quot;The Financial Woes of NYU," Change, October, 1972, p. 17.

prevention programs have been insufficient; and they have failed to develop effective risk management programs.

Aside from the increased rates that many institutions are experiencing, they are also finding that it is difficult to market their insurance programs. These problems have prompted educational institutions to explore alternatives for providing insurance coverage. Stanford University has adopted a \$1,000,000 deductible insurance coverage, and it is estimated that this approach is saving approximately \$275,000 per year, after paying claims. <sup>12</sup> Another attempt to reduce the impact of this problem is through competitive bidding. An example of how competitive bidding can reduce insurance costs can be illustrated by the experience of the Indianapolis public schools. The Indianapolis, Indiana, public schools placed their insurance needs, in 1967, on a competitive bid basis and reduced the cost from \$206,500 to \$126,314 for approximately the same coverage. <sup>13</sup>

Thus, the increased cost of insurance coverage and the difficulty experienced in obtaining this coverage warrant additional exploration into the present practices and alternatives available to the private colleges and universities of Tennessee.

<sup>11&</sup>quot;University Insurance Report 1970," p. 4.

<sup>12</sup> Letter from Robert M. Beth, Director of Risk Management, Stanford University, April 19, 1976.

<sup>13</sup>L. F. Edwards, "Insurance Costs: Up and Almost Away," Nations Schools, February, 1970, p. 52.

# VI. DEFINITION OF TERMS 14

Act of God. An event arising out of natural causes, with no human intervention, which could not have been prevented by reasonable care or foresight. Examples are floods, lightning, earthquakes, and storms.

Actual cash value. An amount equivalent to the replacement cost of a piece of lost or damaged property, less depreciation.

Actuary. A specialist who is trained in mathematics, statistics, and accounting and who is responsible for rate, reserve, and dividend calculations, as well as for other statistical studies.

Adjustment. The determination of the cause and amount of loss, the payment to be made to the claimant, and the apportionment of the loss among participating insurers, assuming that more than one insurer is involved.

Advance payments. Premiums paid in advance of the current policy period.

Agent. One who solicits, negotiates, or effects contracts of insurance on behalf of the insurer.

Aggregate limit of liability. The maximum liability of an insurer for a single loss, a series of losses during one year, or for the entire period of the contract.

<sup>14</sup> All definitions are taken from Robert W. Olser and John S. Bickley, Glossary of Insurance Terms (San Monica, California: Insurors Press, Inc., 1972), pp. 3-161; except the terms "catastrophe" and "fire insurance" which are taken from Insurance Facts (New York: Insurance Information Institute, 1975), pp. 73-74.

Annual report. The insurer's published statement to its stockholders (or policyholders in the case of a mutual), giving pertinent financial information and reviewing the year's activities.

Appraisal. A survey of all elements or property value, made to ascertain either the appropriate amount of insurance to be written or the amount of loss to be paid.

Assumed liability. Liability that would not rest upon a person had he not accepted responsibility by contract, expressed or implied.

Average rate. A rate for a policy established by multiplying the rate for each location by the value at that location and dividing the sum of the results by the total value.

Basic rate. The manual rate from which are taken discounts or to which are added charges to compensate for the individual circumstances of the risk.

Blanket insurance. A form of Property-Liability Insurance that covers in a single contract either multiple types of property at a single location or one or more types of property at multiple locations.

Broker. One who represents an insured in the solicitation, negotiation, or procurement of contracts of insurance on behalf of insureds other than himself and who may render services incidental to those functions except as an employee of the insured.

Cash value. The sum of money required to replace lost or

destroyed property after deduction for depreciation. (Usually used as "actual cash value.")

<u>Catastrophe</u>. A term used peculiarly in insurance to describe a single incident or a series of related incidents involving more than a million-dollar loss.

Claim. The formal demand for payment for a loss coming under the terms of an insurance contract.

<u>Claims reserve</u>. Amounts set aside to meet costs of claims incurred but not yet reported as of the time the statement of reserves is given.

<u>Coinsurance</u>. An agreement by contract or custom recognized by law under which the insured shares losses in proportion to the extent by which the aggregate insurance is then a specified amount or a proportion of the value of the property.

<u>Commission</u>. That portion of the premium as stipulated in the agency contract that is retained by or paid to the agent as compensation for sales, service, and distribution of insurance by him.

<u>Coverage</u>. Scope of protection provided under a contract of insurance.

<u>Deductible</u>. The portion of an insured loss to be borne by the insured before he is entitled to recovery from the insurer.

<u>Deductible clause</u>. A contract provision that sets forth the deductible.

<u>Depreciation</u>. Decrease in value of any type of tangible property over a period of time resulting from use, wear and tear, and obsolescence.

Effective date. The date on which the protection of an insurance policy or bond goes into effect.

<u>Exclusion</u>. A contractual provision that denies coverage for certain perils, persons, property, or locations.

Experience. The loss record of an insured or of a type of insurance written. A statistical compilation relating premium to losses.

Expiration. The date indicated in an insurance contract as its termination date.

Exposure. State of being subject to the possibility of loss.

Extended coverage endorsement. A specific endorsement attached to a Standard Fire Policy usually providing coverage of windstorm, hail, explosion, riot not attending a strike, civil commotion, aircraft and vehicular damage, and smoke.

<u>Fire</u>. Combustion which is rapid enough to produce a flame or glow. A fire for purposes of Fire Insurance, must be hostile, which means it is not in the place for which it is intended.

<u>Fire insurance</u>. Coverage for losses caused by fire and lightning, plus resultant damage caused by smoke and water.

<u>Fireproof (fire-resistive)</u>. Popularly considered to be a piece of property which cannot be damaged by fire. There being little such property in existence, a more meaningful term is "fire-resistive."

Fortuitous event. Unexpected, unforeseen event; without the implication of suddenness.

Group certificate. The document provided each member of a group plan, showing the benefits provided under the group contract.

Group contract. A contract of insurance made with an employer or other entity that covers a group of persons identified as individuals by reference to their relationship to the entity.

<u>Housekeeping</u>. The general care, cleanliness, and maintenance of an insured property.

<u>Insurance</u>. A formal social device for reducing risk by combining exposures. A device for the transfer of the risks of individual entities to an insurer who agrees for a consideration to assume, to a specified extent, losses suffered by the insured.

<u>Insurance policy</u>. The printed form prepared by insurers and bureaus to serve as the contract between insurers and insureds, when the insurance is effective.

<u>Investment income</u>. The return received by insurers from their investment portfolios, including interests, dividend, and rent income and realized capital gains.

<u>Lapse</u>. Termination of a policy because of failure to pay the premium.

<u>Liability</u>. An amount for which the insurer is obligated by law.

Loss. Generally refers to (1) the amount of diminution of the value of the insured's property; (2) the amount sought in his claim; or (3) the amount paid on behalf of the insured under a Liability Insurance contract.

Loss ratio. The percentage of losses in relation to premiums.

Market value clause. A provision that may be used in Property Damage form covering some risks and which obligates the insurer, in event of loss, to pay the established cash selling price of destroyed or damaged stock rather than the actual cash value, as provided in the Standard Fire Policy.

<u>Noninsurance</u>. Making no financial preparation for meeting loss.

 $\underline{\text{Occurrence}}$ . An accident or sickness that results in an insured loss.

Peril. Cause of a possible loss.

<u>Premium</u>. The price for insurance protection for a specified period of exposure.

<u>Proof of loss.</u> A formal statement made by the policyholder to the insurer regarding a loss, intended to put enough information in front of the insurer to enable it to determine the extent of its liability under a policy or bond.

Rate. The cost of a given unit of insurance.

Reinsurance. A type of insurance that involves acceptance by an insurer, called a reinsurer, of all or a part of the risk of loss of another insurer, known as the ceding company.

Replacement cost. The cost of replacing property without deduction for depreciation but upon the basis of the money needed to replace it with the same kind of material and construction.

Risk. (1) Uncertainty as to outcome of an experiment when two or more possibilities exist. (2) A person or insured thing.

(3) In property insurance, the physical units of property insurance, the physical units of property at risk and not perils or hazards.

Self-insurance. Making financial preparation for meeting pure risks by appropriating in advance, sufficient funds to meet probable losses and by maintaining a fund to pay out such losses and absorb the difference between actual and calculated probable losses.

Term. The period for which the coverage runs, which is commonly the period for which the premium is paid.

<u>Vandalism</u>. Intentional damaging or destroying of property.

Malicious mischief.

#### VII. PROCEDURES

The purpose of this study was to evaluate the risk management and property insurance practices of selected private colleges and universities in Tennessee and to recommend improved practices in these areas. The study included a review of literature related to risk management and property insurance including Tennessee State Insurance Laws, a review and summary of selected self-insurance programs, the development of risk management and property insurance criteria, an examination and evaluation of risk management and property insurance practices, an evaluation to determine the suitability of an association of private colleges and universities for self-insurance, and conclusions and recommendations.

Procedure 1. To review the literature related to risk management and property insurance. Literature which was relative to risk

management and property insurance was reviewed. Additionally, studies conducted at both the national and state level describing risk management and property insurance practices and those conducted to determine the feasibility of governmental or other group self-insurance programs were reviewed. Tennessee state laws pertaining to property insurance were reviewed and those laws relative to the study were summarized.

Procedure 2. To review and summarize selected full and partial self-insurance programs. In order to identify the selfinsurance programs that were in use by private colleges and universities, a letter was written to each state association of private colleges and universities asking it to identify such practices in its state (Appendix A). Each association, with the exception of one which did not respond, stated that full or partial self-insurance pools or associations did not exist in its respective state. The literature was reviewed to identify those states that had a state sponsored self-insurance program which insured public higher educational properties and/or public primary and secondary school property. Each state, located in the Southeastern United States which had a state self-insurance program that included educational facilities, was asked to furnish the researcher a historical summary and current operating data on the fund (Appendix A). The state self-insurance programs were reviewed and summarized.

Procedure 3. To develop risk management and property insurance criteria. Several persons, who were nationally recognized for their expertise in the area of risk management and property insurance, were invited to become members of a panel which would develop risk management and property insurance criteria. The Delphi technique was used to develop the criteria. Probe I requested that each panel member identify those criteria that he/she believed essential for an adequate college or university risk management and property insurance program. The responses of panel members, to Probe I, were edited to eliminate duplication and the suggested criteria were consolidated into a single list. This consolidated list, Probe II, was forwarded to each panel member who was then asked to rate each item as to "level of importance" on a 1 to 5 scale (1 - not important, 2 - of little importance, 3 - of some importance, 4 - very important, 5 - absolutely essential). The responses of the panel members to Probe II were tabulated and those suggested criteria that received a rating of either 4 or 5 by 80 percent of the panelists were identified as the criteria essential for an adequate risk management and property insurance program for an institution of higher education (Appendix B). A list of panel members can be found in Appendix C. The list of twenty-three criteria developed by the panel is located in Appendix D.

Procedure 4. To examine and evaluate the risk management and property insurance practices. The criteria developed in Procedure 3 were included as Part I of a questionnaire which each of Tennessee's private colleges and universities, that were members of the Tennessee Council of Private Colleges and were accredited by the Southern Association of Colleges and Schools, were asked to complete. Parts II and III

of the questionnaire requested additional data that could be used to further evaluate risk management and property insurance practices. A follow-up letter enclosing a second copy of the questionnaire and telephone contact were used with those institutions that failed to respond to the questionnaire in the alloted time (Appendix E). A list of those colleges and universities which were forwarded questionnaires can be found in Appendix F. Institutions were assigned an alphabetical indentifier, which would be used in lieu of institutional name, in order that data which may be considered confidential or sensitive could be used in the study.

To evaluate institutional responses to Part I of the questionnaire, the colleges and universities were categorized according to
the size of their annual operating budget (Category I - under \$2
million, Category II - between \$2 million and \$3 million, Category
III - over \$3 million). Percent of criteria met by each institution
and institutional category was computed. In order to determine the
adequacy of the risk management and property insurance programs of
Tennessee's private colleges and unviersities, as indicated by the
criteria, the following performance levels were established by the
researcher: fulfilled 70 percent or more of the criteria satisfactory; fulfilled 50 - 69.99 percent of the criteria - marginal;
and those that fulfilled below 50 percent of the criteria unsatisfactory.

The adequacy of self-assumption of risk efforts, through the use of deductibles by each institution, was evaluated. First, the

deductible assumed by each institution was divided by the annual operating budget to provide the percentage of annual operating budget which each institution had "self-assumed." Secondly, using the self-assumption of risk guidelines furnished by Tarr<sup>15</sup> and Beth<sup>16</sup> (.1 of 1 percent per occurrence and 1 percent annual aggregate of operating budget) a comparison was made between the actual self-assumption of risk and the recommended self-assumption of risk.

Procedure 5. To examine the insured loss versus premium paid ratio for individual institutions and the institutions as a consolidated group. In order to examine the loss experience of Tennessee's private colleges and universities, the ratio of insured losses to property insurance premiums paid was computed for each institution for the sum of all years for which data was available. Additionally, insured loss/premium ratios 17 were computed for fiscal years 1972 through 1975, those years for which a significant number of institutions could provide data, to provide information pertaining to the institutions' experiences as a consolidation group. Insured loss/premium ratios were expressed as a percent.

<sup>&</sup>lt;sup>15</sup>Note from Stanley R. Tarr, Director of Risk Management, Rutgers University, December 16, 1976.

<sup>16</sup> Letter from Robert M. Beth, Director, Risk Management, Stanford Unviersity, December 15, 1976.

<sup>17</sup> Some authorities refer to this as a premium/loss ratio.

Procedure 6. To evaluate the suitability of Tennessee's private colleges and universities for a self-insurance association. In order to determine whether or not Tennessee's private colleges and unviersities should form a self-insurance association, an assessment was made using criteria developed by the Florida Public Schools Self-Insurance Study Committee. <sup>18</sup> Each of the criteria was quoted and then followed by a discussion of how it would apply to an association of private colleges and universities of Tennessee.

Procedure 7. To draw specific conclusions and make recommendations based on the findings of the study. Based upon the findings of the study recommendations were made which were designed to improve the risk management and property insurance practices of Tennessee's private colleges and universities.

#### VIII. ORGANIZATION OF THE STUDY

Chapter I of the study provides an introduction to the study and presents a statement of the problem, purpose of the study, basic assumptions, delimitations, importance of the study, definition of terms, procedures, and the organization of the study.

Chapter II of the study presents a review of related literature, including pertinent research and a summary of state insurance laws.

Report of the Florida Public School Self-Insurance Study
Committee (Tallahassee: State Department of Education, 1969), pp. 1519; cited by Jack G. Nichols, "Self Insurance for the Public Schools of Tennessee," (unpublished doctoral dissertation, University of Tennessee, 1971), pp. 62-65.

Chapter III contains a summary of selected state selfinsurance plans.

Chapter IV contains the presentation, analysis and interpretation of data pertaining to risk management and property insurance practices of Tennessee's private colleges and universities. An evaluation to determine the suitability for a self-insurance association is also contained in the chapter.

Chapter V contains the summary, findings, recommendations and concluding statement of the study.

#### CHAPTER II

#### REVIEW OF SELECTED RELATED LITERATURE

#### I. INTRODUCTION

The purpose of this chapter is to review selected literature related to insurance for educational properties. Although most studies on the subject have addressed public primary and secondary education, the salient points of the studies are relevant to private higher education as well. The chapter will be divided into four parts: Part I Introduction, Part II Risk Management Principles and Options, Part III Related Studies and Part IV State Insurance Laws.

#### II. RISK MANAGEMENT PRINCIPLES AND OPTIONS

## Risk Management

Risk is defined "as uncertainty of financial loss." Risk management is a formal program through which risk can be identified, treated, controlled, and funded. By viewing the origins or causes, all risks may be considered to fall into two basic categories or groups: (1) fundamental, and (2) particular.

<sup>&</sup>lt;sup>1</sup>C. A. Kulp and John W. Hall, <u>Casualty Insurance</u> (New York: The Ronald Press Company, 1968), p. 3.

College and University Business Administration (Washington, D.C.: National Association of College and University Business Officers, 1974), p. 1.

<sup>&</sup>lt;sup>3</sup>Kulp and Hall, p. 3.

Fundamental risks are those risks that cannot be identified as the fault of any person in particular. The source of most risks which fall into this category are social, political, or economic. Fundamental risks can also be the result of such natural causes as geography, climate, and geology. The impersonality of origin is a common characteristic that tends to categorize this classification of risk. 4

The second category of risk, particular risks, is essentially personal in origin and consequences. Due to the nature of the origin, the individual can exercise various degrees of control over these risks. 5

The essential initial step in treating risk at the educational institution is the development of a policy statement which specifies the objectives and limitations of the risk management program. The responsibility for the development of such a policy would rest with the chief business officer of the institution who would be responsible for staff coordination and presentation to the governing board. The policy statement must be specific in detail, yet flexible enough to allow the administration of the program without frequent action by the governing board. <sup>6</sup>

The responsibility for the management of risk must be identified at each institution or within each system of higher education.

<sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup>Ibid., p. 4.

<sup>&</sup>lt;sup>6</sup>College and University Business Administration, p. 1.

This task is usually assigned to the chief business officer of the institution, the function of risk management may warrant a specialist or even a department to handle this responsibility.

The program of risk management developed by the risk manager should be one which is more effective than that of merely purchasing insurance to cover the risk. "The ultimate evaluation of a program of risk management is success in preventing personal injury and property loss, while reducing the cost to a minimum." Therefore, a suitable method should be chosen for treating risks.

One method of treating risk is simply to assume it. However, in most instances this action is highly undesirable. Aside from this action, two of the primary methods of meeting risk are: (1) reduce or eliminate those personal, economic, or other factors that cause or contribute to the existence of hazard; and (2) reduce or eliminate the objectionable financial consequences of the hazard.  $^9$ 

Action designed to reduce or eliminate a hazard can only experience a high degree of success when applied to particular risks. There exists a wide variation in effectiveness of hazard prevention even within the class of particular risks. The conditions in which man lives contain numerous hazards, unfortunately because of this fact these hazards can never be totally eliminated. However, if man cannot

<sup>7&</sup>lt;sub>Ibid</sub>.

<sup>&</sup>lt;sup>8</sup>Ibid.

<sup>9</sup>Kulp and Hall, p. 7.

eliminate the hazard perhaps he should work toward eliminating the consequences, the uncertainty of financial loss.  $^{10}$ 

There are options available to the institution of higher education when risks have been identified that cannot be eliminated and have not been transferred by contract. Among the options available to the chief business officer are no-insurance or noninsurance, self-insurance, and commercial insurance coverage. Additionally, various combinations of these options may be appropriate for some institutions.

## No-insurance or Noninsurance

Under the no-insurance concept the institution or system carries no commercial insurance coverage and does not establish financial reserves. Losses incurred by the institution or system are paid from current funds. The concept originated in metropolitan areas where the governmental body became aware that expenditures for insurance premiums were larger than property losses.

The no-insurance alternative is an option that should be used only by large institutions or systems which have excellent financial reserves and facilties which are scattered on different campuses or somewhat dispersed on a single campus. Even a large institution, with sizable financial reserves, could find itself in a difficult position if several of its facilities were destroyed within a short period of

<sup>10</sup> Ibid.

<sup>11</sup> Stephen J. Kenzevich and John G. Fowlkes, <u>Business Management</u> of Local School Systems (New York: Harper Brothers, 1960), p. 276.

time. 12 To determine whether the no-insurance option is feasible an institution should consider, in addition to those factors mentioned above, the premium and administrative costs versus the actual losses sustained for a specific period. Caution must be exercised in the selection of the base period for such an analysis. Additionally, when the institution establishes its base period the costs must be converted into current dollars so that a true cost comparison can be made. 13 Linn and Joyner indicate that in establishing a base period for premium/loss comparison a ten or even twenty-year period may not be very dependable. 14

## Self-insurance

Self-insurance, like no-insurance, utilizes the concept of retaining a risk or risks rather than transferring them by contract to an insurance company; however, a self-insurance program systematically establishes financial reserve funds upon which it can make withdrawals to cover losses. The self-insurance program can be a full coverage program or a partial self-insurance program which utilizes commercial insurance for excessive coverage over a specified amount or for

<sup>12</sup>K. Forbis Jordan, School Business Administration (New York: The Ronald Press Company, 1969), p. 291.

<sup>&</sup>lt;sup>13</sup>Ibid., p. 292.

Henry H. Linn and Schuyler C. Joyner, <u>Insurance Practices</u>
<u>In School Administration</u> (New York: The Ronald Press Company, 1952),
p. 75.

specified hazards. 15 Self-insurance offers one advantage over noinsurance, a record of risk costs that would probably be lost. 16

Athearn states that a risk which is suited for self-insurance should possess the same characteristics as a risk which is qualified for commercial insurance. These characteristics are:

. . . the potential loss would be significant but the probability would not be high, the probability of loss would be calculable, there would be a large number of homogeneous exposure units, losses would be accidental and definite, and a catastrophe could not occur. 17

Before adopting a program of self-insurance an educational institution or system should carefully consider many factors. Jordan suggests that a system considering the adoption of a self-insurance program consider the following questions.

1. Are the risks to be covered sufficiently large to permit the orderly working of the law of averages?

2. Is the amount of coverage on each risk relatively uniform throughout the school district?

3. Can extremely hazardous risks be excluded from the selfinsurance program and included in the regular program?

4. Are the risks geographically located so they will not be damaged in a single disaster?

5. Will the school district delay placing all risks under the program until the fund is adequate to provide protection?

6. Are the resources available to the fund adequate to absorb

a large loss without undue hardship?

7. Are there adequate assurances that the fund will not be used  $_{18}$ for any purpose other than the one for which it was intended.

<sup>&</sup>lt;sup>15</sup>Jordan, pp. 290-291.

<sup>&</sup>lt;sup>16</sup>College and University Business Administration, p. 3.

James L. Athearn, <u>Risk and Insurance</u> (New York: Appleton-Century-Crofts, 1969), pp. 42-43.

<sup>18</sup> Jordan, p. 291.

Kenzevich and Fowlkes identify certain conditions that should be satisfied before adopting a self-insurance plan for property. They state that the following are the bases upon which a self-insurance program should rest.

- The number of property units to be converted should exist in sufficiently large number to make the application of averages possible.
- 2. The amount of coverage per risk should be reasonably small and uniform. If the value of a single risk is large enough to deplete materially or exhaust insurance reserves or overburden tax receipts necessary to replace the property unit where a loss occurs, the self-insurance plan is on a very shaky foundation.
- 3. Hazardous property units should be insured with other underwriters. Only the reasonably nonhazardous property risks should be carried by the self-insurance fund.
- 4. The risks covered by the self-insurance fund should be independent of one another, i.e., a fire occurring in one should not be capable of spreading to another. Self-insurance is questionable if all school buildings are located on one site or adjoining sites or within areas subject possibly to a sweeping fire.
- 5. There should be a gradual accumulation of a self-insurance fund and a gradual transfer from commercial underwriters to assumption of financial losses by the self-insurance fund. A sudden transfer from 100 percent commercial insurance companies to 100 percent self-insurance before a sufficient reserve has been developed may wipe out the self-insurance fund if large and unexpected losses occur during the early years.
- 6. In considering the advisability of self-insurance favorable loss experience during the preceding 10- or 20-year period should be cautiously and conservatively interpreted.
- 7. Only school districts that are in sound financial condition should plan self-insurance programs. Districts that can barely obtain sufficient funds to meet operating costs should consider other types of insurance protection.
- 8. The self-insurance fund should be kept inviolate. The seemingly idle insurance reserve funds needed in times of unexpected and large losses are a source of temptation. Tampering and transfers from this fund should be prohibited by school board policy if not by law.
- There must be careful management of self-insurance reserve funds. The reserve funds should be placed in sound

investments where security rather than high yields should be the keynote. 19

Additionally, Candoli, et al., identifies considerations which must be entertained when making a decision concerning the adoption of a self-insurance program.

1. The magnitude of the spread of risk.

- 2. The general comparability of value of the several buildings in the system so as to prevent distortion in the amount of risk.
- The general comparability of risk of the several buildings of the system so as to prevent distortion in the amount of risk.
- 4. The geographic separation of buildings to avoid multiple loss from a single conflagration.
- 5. Transition of coverage from commercial companies to selfinsurance in the low-risk to high-risk sequence.
- 6. The probabilities and magnitude of future expected losses, based on current risk exposure rather than on past loss records.
- 7. The fiscal alternatives available to the school system to replace a loss exceeding the revenue available in the self-insurance fund.
- 8. The ability of the school system to maintain the self-insurance fund at the level necessary to provide adequate protection.  $^{20}$

The general pattern followed by an institution or system desiring to establish a self-insurance fund is annual contributions to the fund, along with the investment of accumulated reserve, with the interest earned on the reserve added back to the fund. Only when the institution has accumulated an adequate reserve which is sufficient

<sup>&</sup>lt;sup>19</sup>Kenzevich and Fowlkes, pp. 276-277.

<sup>20&</sup>lt;sub>I</sub>. Carl Candoli, et al., <u>School Business Administration</u> (Boston: Allyn and Bacon, Inc., 1973), p. 299.

to cover the reasonable probability of loss should it become completely self-insured. <sup>21</sup>

There are numerous arguments advanced both for and against self-insurance programs. Mills presents the following points in favor of state self-insurance funds.

1. The state can effect a substantial saving since commercial companies must bear expense of agent's commissions, advertising, and other related expenses.

2. Premiums paid into a state insurance fund which are invested will, after a fund has been operating over a period of years, provide a surplus which will be sufficient to greatly reduce premium costs or remove them entirely.

3. By insuring with a state fund, additional savings may be effected on insurance of public buildings since most public buildings, due to fire-resistive construction, are likely to have a lower loss ratio than other types of property.

4. Public property that is required by statutory provision to participate in a state fund usually is thereby required to provide adequate coverage against loss by fire and other hazards, whereas if this insurance coverage were left for negotiation with commercial insurance agents, the property may not be insured in the proper amount.

5. By arranging for an adequate initial appropriation, sound management of the state fund, together with adequate reinsurance, the fund will be able to withstand fire losses without additional legislative appropriations.

6. There is little cause for concern regarding possible misappropriation or diversion of state insurance funds if legislation creating such funds is properly drafted and the officials administering them are properly bonded. 22

<sup>21</sup> Ibid.

<sup>&</sup>lt;sup>22</sup>Hugh L. Mills, "A Study of Public School Insurance in Arkansas" (unpublished doctoral dissertation, University of Arkansas, 1958), pp. 163-164; cited by Gary J. Dutton, "Alternative Plans for Providing Insurance Protection for the Physical Property of the School Systems of the Upper East Tennessee Educational Cooperative" (unpublished doctoral dissertation, University of Tennessee, 1975), pp. 39-40.

The following criticisms and observations about self-insurance are made by Herbert R. Preston, former president of the Insurance Information Institute.

1. State and municipal self-insurance lacks an essential element of insurance in that there is no transfer of risk.

2. A self-insurance fund confined to a single state or municipality lacks a sufficient number and spread of risks to protect the fund against large losses. Most funds would be wiped out by one large fire.

 Since self-insurance usually provides no opportunity for selection of risks, or for proper reflection of risks in premium rates, fundamental principles of fire insurance

underwriting are disregarded.

4. Since many decades are required to build up an adequate self-insurance fund through premium payments, it is doubtful whether a given fund would ever reach a point at which it would be safe to reduce payments into the fund. Meanwhile, establishment and administration of the fund impose extra burdens on taxpayers.

5. Under self-insurance plans, it is unlikely that insurance costs actually would be reduced, since the scope of operations would be too small to realize the competitive economies of the vast private insurance companies. For comparable services, administrative costs inevitably would be higher.

6. Placement of commercial insurance through local agents, which can be handled without favoritism through state or local agents' associations, secures the services of insurance professionals in setting up and maintaining a sound insurance program. Self-insurance plans offer no substitute for services.

7. Adherence to fire safety and accident prevention standards, and use of modern package policies, can enable a governmental unit to achieve large reductions in premiums and still get

full protection from private insurance.

8. If the pressure from the fire insurance organization for fire safety is removed, fire losses to public properties are likely to increase. When these properties are school buildings, it is not merely dollars but the lives of children that are at stake.

9. The fact that building construction is described as "fire-proof" or "fire-resistive" does not guarantee that large losses will be avoided. Many major fires have occurred to so-called fire-resistive buildings owned by states and municipalities.

10. A major fire might bankrupt the fund, and necessitate a large legislative appropriation or bond issue. While money is being raised, there could be long delays in the rebuilding of destroyed properties. 11. A main function of insurance is to replace uncertainty with certainty, so that a small known cost which may be budgeted replaces an unknown, possibly large loss which can disrupt a governmental budget. No plan which gives inadequate protection against large losses can perform this function.

12. Banks and other lending institutions purchasing bonds of governmental units often require them to carry fire and other lines of insurance in sound commercial companies. Under self-insurance, this could lead to difficulty in financing new construction or capital improvements.

13. Proper investment of funds is an important part of any insurance program, yet self-insurance funds are likely to be in the hands of a busy controller or treasurer who can

give the task part of his time.

14. Local governments would have to pay people to provide the usual administrative, engineering, safety and other services of insurance, with the differences that the work would be done largely by untrained and inexperienced personnel.

15. A large majority of big industrial companies, which are in a more favorable position than local governments for proving the worth of self-insurance, carry their risks in

commercial companies.

16. Failure of a scheme of self-insurance will invariably bring public censure upon officials responsible for going into the plan.

17. Even if a self-insurance plan should meet all the conditions of sound insurance, there is no guarantee that succeeding administrations will maintain the soundness of the program.

18. The presence of large "idle" funds invites diversion to other public purposes, affecting the ability of the fund

to furnish protection.

19. There has been no known instances where a governmental unit has reduced taxes by not purchasing insurance. On the contrary, the record is filled with cases where heavy additional taxes have been levied because of uninsured losses to governmental property.

20. Self-insurance constitutes an invasion by government of a field of private enterprise and such invasion is contrary to public policy and detrimental to the public welfare. 23

<sup>23</sup>Herbert R. Preston, "Insurance Versus Self-Insurance,"

<u>Journal of Insurance Information</u>, XXVIII (January-February, 1967), npn.

#### Commercial Insurance

A third alternative available to educational institutions, and probably the most common approach to risk management, is commercial insurance. Insurance is defined by Magee and Serbein as:

A contract by which the one party, in consideration of a price paid to him adequate to his risk, becomes security to the other that he shall not suffer loss, damage or prejudice by the happening of the perils specified to certain things which may be exposed to them. 24

Athearn's definition of insurance may be more easily understood because of its more descriptive nature.

Insurance is a social device which combines the risk of indiviuals into a group, using funds contributed by members of the group to pay for losses. The essence of the insurance scheme is that it is a social device, that involves the accumulation of funds, that it involves a group of risks, and that each person or firm who becomes a member of the group  $\underline{\text{transfers}}$  his risk to the whole group. 25

The commercial insurance company's premium must be sufficient to pay the cost of doing business, cover the losses sustained by policyholders, and return a profit. As a general rule a profit margin of 5 percent is considered reasonable by most states. However, most states allow an additional 1 percent for catastrophes. Best's

<sup>24</sup> John H. Magee and Oscar N. Serbein, <u>Property and Liability Insurance</u> (Homewood, New Jersey: Richard D. Irwin, Inc., 1967), pp. 11-12.

<sup>&</sup>lt;sup>25</sup>Athearn, p. 28.

<sup>&</sup>lt;sup>26</sup>Kenzevich and Fowlkes, p. 274.

<sup>&</sup>lt;sup>27</sup>Robert Riegel, Jerome S. Miller, and C. Arthur Williams, Jr., <u>Insurance Principles and Practices-Property and Liability</u> (Englewood Cliffs: Prentice-Hall, Inc., 1976), p. 250.

<u>Insurance Reports</u> states that a 50 percent loss ratio is an equitable standard under which an insurance company can operate.

It has generally been accepted by the insurance industry that 50 percent is an allowable loss ratio, thereby leaving 42 percent for acquisition costs. Thus, the generally accepted standards for casualty insurance is as follows:

Acquisition Cost (cost of doing business, selling services, and overhead) . . . . . 42 percent Allowable Loss Ratio . . . . . . . . . . . . . . . 50 percent Underwriting Profit . . . . . . . . . . . . . . . . 5 percent Conflagration (extensive property damage) . . 3 percent 28

Although the reader will recognize that the above data pertaining to a 50 percent loss ratio is taken from a 1949 publication, the same permissible loss ratio is cited in a current publication in reference to fire insurance coverage. <sup>29</sup> Thus, a permissible loss ratio of 50 percent of the premiums paid has remained consistent over an extended period of time and serves as a guide when evaluating the loss ratio experience of educational institutions.

There are two primary types of insurance companies that provide insurance protection for educational facilities, the stock insurance company and the mutual insurance company. Stock insurance companies provide the vast majority of insurance protection" . . . hold 75 percent of the total assets of all property insurers, 70

<sup>28</sup> Best's Insurance Reports, Fire and Marine (New York: Alfred M. Best Company, Inc., 1949), p. xiii; cited by Jack G. Nichols, "Self-Insurance for the Public Schools of Tennessee: A Feasibility Study" (unpublished doctoral dissertation, University of Tennessee, 1971), p. 18.

 $<sup>^{29}</sup>$  Riegel, Miller, and Williams, p. 250.

percent of premium volume and have 85 percent of the total capital and surplus available for protection of policyholders.  $^{30}$ 

Stock insurance companies are owned by stockholders. The capital stock serves as a reserve to assure payment for losses even though premiums are insufficient to pay them. The stockholders of the stock company receive dividends based upon the profits of the company, in relationship to their investment. 31

A mutual company is organized without the capital stock approach of the stock company. The mutual company depends primarily upon premiums paid by policyholders to cover losses and to establish an adequate financial reserve. The premium rates charged by the mutual insurance company is usually lower than those charged by the stock company for the same coverage. <sup>32</sup>

Angell describes the mutual insurance company as one of the three following types: pure assessment mutuals, factory mutuals, and advance premium mutuals. The pure assessment mutual operates by assessing members as needed to cover losses. This type of mutual has a minimum number of employees, sometimes only a manager, and operates on the theory that it can save the profits and high administrative overhead paid to stock or large mutual organizations. Although assessment companies operate in a number of fields, their

<sup>30</sup> Condoli, et. al., p. 295.

<sup>31</sup> Kenzevich and Fowlkes, pp. 274-275.

<sup>&</sup>lt;sup>32</sup> Ibid., p. 275.

greatest success has been in fire insurance coverage. The lack of financial strength to cover unexpected heavy losses has proven to be the greatest disadvantage of the assessment company. 33

The factory mutual insurance company takes its name from the fact that they were formed to insure only factories. The nine individual companies that compose the Associated Factory Mutual Fire Insurance Companies specialize in insuring only large firms which have sprinkler leakage systems. These mutuals are able to offer low rates because of their strict underwriting requirements and frequent inspections. The factory mutual returns excess premiums paid at year's end to the policyholder in dividends. 34

The third type of mutual insurance company is the advance premium mutual. This type of mutual establishes a fixed rate in advance to cover operating expenses and losses along with an annual dividend. However, if the fixed rate falls short of needed capital the company can assess members unless it is organized as a "nonassessable mutual." Even though the company has the power to assess policyholders, the policyholder's liability is usually limited to one additional premium payment. The nonassessable mutual companies write the greatest premium payment volume of insurance coverage issued by mutual companies. 35

Frank Joseph Angell, <u>Insurance Principles and Practices</u> (New York: The Ronald Press, 1959), pp. 686-687.

<sup>&</sup>lt;sup>34</sup> Ibid., pp. 687-688.

<sup>&</sup>lt;sup>35</sup> Ibid., pp. 688-689.

In addition to selecting the type of insurance company best suited for the educational institution, care must be exercised in evaluating the soundness of the particular companies with whom the coverage may be placed. Several references are available to the manager of the institutional insurance program; however, ratings of insurance companies by Alfred M. Best Company of New York is probably the most widely recognized. "An A:AA rating should be the minimum acceptable standard for companies doing business with schools." An A:AA rating indicates that the company has a net safety factor of 10 to 12.5 million dollars. Additionally, state departments of insurance can also be a valuable source of information on companies which do business in the state.

Herbert Preston<sup>38</sup> identifies several benefits that the policy-holder realizes from a commercial insurance company.

1. Full protection against losses. The private insurance company builds ample financial reserves by spreading risks over a vast number of units and a wide geographic area. The commercial insurance company also employs the practice of reinsurance to spread large risks to many companies. Thus, the commercial company can pay even the largest losses caused by earthquakes, hurricanes, floods, etc.

<sup>&</sup>lt;sup>36</sup>Kenzevich and Fowlkes, p. 275.

Best's Insurance Reports, Property and Liability - 1974 (New York: A. M. Best Company, Inc., 1974), p. x.

<sup>&</sup>lt;sup>38</sup>Preston, npn.

- 2. Loss prevention. The commercial insurance company provides the policyholder with the advice of professional engineers as well as safety and inspection services. The establishment of prescribed standards in both fire prevention practices and safety engineering tend to reduce the risks of the insured. The advice of insurance engineers, during building planning and construction can reduce insurance costs as well as improve the fire-resistive nature of the facility. Numerous loss prevention services are provided to non-policyholders as well as to policyholders. Among these loss prevention services are: fire prevention standards for towns and cities, construction standards, Underwriters' Laboratories tests of materials and fire safety products, and educational programs designed to promote the awareness of and the reduction of risks in numerous areas.
- 3. Taxes. The private insurance company, like other corporations, pay taxes to local, state, and federal governments.
- 4. Agency services. The commercial insurance company offers other services through its agents. These services include:
  - Professional analysis of hazards, and designing of insurance programs tailored to afford optimum protection.
  - Preparation of a survey of all buildings within the governmental unit, to facilitate a complete insurance program.
  - Analysis of governmental property appraisals and recommendation as to amounts of protection.
  - Analysis of physical hazards, and recommendations for improvements designed to result in the greatest possible reduction.
  - Frequent consultations with rating authorities in checking into fire protection facilities, to enable a governmental unit to take advantage of further improvements which would reduce rates.
  - Consultation during the planning stages of new construction, often resulting in suggestions which will result in sizeable savings in fire insurance costs.

7. Fire safety and accident prevention activities, carried on through state and local agents' associations. These are particularly important in rural areas and in medium and small cities, towns, and school districts. The long range effect is the lowering of insurance rates, but even more important is the savings of lives and the conservation of property.

8. Availability of the local agent to assist public officials with insurance and safety problems and in handling of innumerable details at the local level.

9. Valuable assistance in expediting prompt and fair settlement of losses, facilitating rapid repair of properties and restoration of community services.39

To assure that adequate commercial insurance coverage is carried on the property of the educational institution, the value of the facilities must be determined. There are various methods that can be used for property appraisal. These include:

- Value estimates reached by a team of school and insurance officials;
- 2. Value estimates reached by a reputable architect or contactor;
- 3. Value estimates reached from adding the original cost to the cost of subsequent additions and applying a depreciation factor; and
- 4. Value estimates reached by an engineering appraisal firm. 40

Hill and Colmey state that the fourth method, an engineering appraisal firm, is probably the most reliable method.  $^{41}$ 

The insured can realize economies in the purchase of insurance coverage by utilizing such techniques as lengthening the term of the policy and/or increasing the amount of the deductible assumed by the policyholder. As a rule, the longer the term of the policy the lower

<sup>39</sup> Ibid.

<sup>40</sup> Frederick W. Hill and James W. Colmey, School Business Administration: Book One (Minneapolis: T. S. Denison and Company, Inc., 1964), pp. 205-206.

<sup>&</sup>lt;sup>41</sup> Ibid., p. 205.

the given rate for coverage. "Usually, the three-year rate is two and one-half times the one-year rate, and the five-year rate is four times the one-year rate." Present trends in property insurance coverage are toward term policies covering a five-year period rather than annual policies. 43

The amount of savings that an educational institution can realize through the use of deductibles can be significant. However, the institution which purchases insurance coverage with a deductible clause is self-insured for that amount. The <u>Tennessee Rule Book</u>, published by the Insurance Services Office, furnishes suggested reductions in rates or credits for various deductible amounts. The <u>Tennessee Rule Book</u> suggests the following savings.

|  | Credit: A                   | All Perils                  |
|--|-----------------------------|-----------------------------|
|  | Minimum                     | Maximum                     |
| \$5,000 Deductible   |                             |                             |
| More than \$500,000<br>250,001 to 500,000<br>100,001 to 250,000<br>50,001 to 100,000<br>50,000 or less | 6% t<br>7<br>10<br>14<br>20 | 22%<br>23<br>24<br>25<br>26 |

<sup>&</sup>lt;sup>42</sup>Kenzevich and Fowlkes, p. 278.

<sup>43</sup> Ibid.

Tennessee Rule Book, Insurance Services Office (Nashville, Tennessee, 1976), p. 55.

| \$10,000 Deductible    |     |    |     |
|------------------------|-----|----|-----|
| More than \$1,000,000  | 8%  | to | 24% |
| 500,001 to 1,000,000   | 10  |    | 25  |
| 250,001 to 500,000     | 12  |    | 26  |
| 100,001 to 250,000     | 17  |    | 27  |
| 100,000 or less        | 21  |    | 28  |
| \$25,000 Deductible    |     |    |     |
| More than \$1,250,000  | 13% | to | 30% |
| 833,334 to 1,250,000   | 14  |    | 31  |
| 500,001 to 833,333     | 17  |    | 32  |
| 250,001 to 500,000     | 20  |    | 33  |
| 250,000 or less        | 25  |    | 34  |
| \$50,000 Deductible    |     |    |     |
| More than \$1,666,666  | 17% | to | 34% |
| 1,250,001 to 1,666,666 | 18  |    | 35  |
| 714,286 to 1,250,000   | 20  |    | 36  |
| 500,001 to 714,285     | 25  |    | 37  |
| 500,000 or less        | 27  |    | 38  |
| \$75,000 Deductible    |     |    |     |
| More than \$1,875,000  | 20% | to | 36% |
| 1,071,429 to 1,875,000 | 22  |    | 37  |
| 750,001 to 1,071,428   | 26  |    | 38  |
| 750,000 or less        | 28  |    | 39  |

Caution should be exercised to make certain that the property of an educational institution is not over-insured. Over-insurance is a waste of the financial resources since the insurance company is not liable to the insured for more than the insurable value of the property. Unless the property is insured for replacement value, the insurable value of the building less depreciation will be the amount paid in case of loss. The educational institution or system should be aware that certain items are not included when computing the amount of loss suffered when an insured facility is damaged or destroyed by fire or

other peril. All fire insurance policies exclude as "noninsurable items" all building costs twenty-five feet beyond building lines and other items such as grading, landscaping, sewers, underground utilities, and cesspools. Numerous policies exclude sidewalks adjacent the building, engineer's fees, architect's fees, foundations, and building-plan costs. 45

The property insurance coverage carried by an educational institution can include or exclude many types of coverage. The following forms of coverage and endorsements are those most commonly carried on the property and contents of educational facilities.

Fire and extended coverage. The standard fire insurance contract covers the specified building or buildings and the contents of those buildings against loss by fire and lightning. The standard policy can be extended to cover such perils as hail, tornado, earthquake, riot, windstorm, explosions, vandalism, smoke damage, riot attending a strike, motor-vehicle damage, aircraft damage, etc., through the use of endorsements. Although the extended coverage endorsement does not increase the amount of coverage on a building, it does provide that the scope of risks covered by the policy will be much broader than fire and lightning coverage. The standard fire policy, with extended coverage endorsements, should be the basis upon which a sound educational facilities insurance program is built.

<sup>&</sup>lt;sup>45</sup>Clifford H. Allen, <u>School Insurance Administration</u> (New York: The Macmillan Company, 1965), pp. 23-24.

<sup>46</sup> Riegel, Miller, and Williams, pp. 147-149.

The Public and Institutional Property Form (PIP) is a second insurance form available to public and private institutions not operated for a profit or for commercial or industrial purposes. The perils covered by the PIP form are fire, lightning, and extended coverage. The policyholder may cover additional perils through endorsements. To qualify for coverage under the PIP form, the insured must meet certain obligations.

The obligations of the insured are (1) to cooperate in a program of inspection and prevention, (2) to pay a premium of at least \$500 a year, (3) to file a sworn statement of values and by 90 percent insurance to value (in lieu of coinsurance requirements), and (4) to accept a deductible of a least \$100 on each building up to \$1,000 per occurrence.47

Vandalism and malicious mischief. This coverage can be added to the standard fire insurance policy by the use of an endorsement. The endorsement covers direct property loss by cranks, delinquents, pranksters, and others who willfully destruct the property of others because of revenge, spite, or the disregard of others rights rather than a desire for personal gain. Because of the lack of ability to predict the losses which may be experienced under this endorsement, vandalism and malicious mischief coverage may adversely affect property insurance rates. This coverage excludes damage to glass, damage from burglary, theft, larceny, pilferage, and consequential or indirect losses. 48

<sup>&</sup>lt;sup>47</sup> Ibid., p. 195.

Eugene E. Demarest, Know Your Fire Insurance and Extended Coverage (New York: Canyon Press of New York, 1951), pp. 17-19.

Glass insurance. The insurance coverage contained in the glass insurance policy is designed to reimburse the policyholder for loss or damage to glass resulting from accidental or other causes. However, damage caused by fire or war are excluded from glass insurance coverage. The policy also provides for the repairing or replacing of damaged frames, boarding up openings, and the removal of obstructions so the glass can be replaced. However, the maximum payment that can be made is seventy-five dollars under each provision except the first. The premium that is charged for glass coverage is computed on six factors. The factors are size, cost, kind and use, location, type of occupancy, and territory. A 7½ to 10 percent credit can be realized by assuming a deductible amount which can range from \$50 to \$1,000.

Inland marine insurance. Inland marine insurance is a coverage that assumes risk where marine insurance stops. This form of coverage developed out of ocean marine insurance; providing insurance coverage for property in transit and movable property. Inland marine insurance policies fall into two categories: property insurance, pays for damage occurring to property; and liability insurance which protects protects the policyholder against liability for damage to property which is in the policyholder's custody. The educational institution

<sup>&</sup>lt;sup>49</sup>Riegel, Miller, and Williams, pp. 402-404.

<sup>&</sup>lt;sup>50</sup>Ibid., pp. 302-305.

purchases this type of all-risk insurance to cover a variety of property such as audio-visual equipment, office equipment, musical equipment, athletic equipment, and other such items.

Boiler and machinery insurance. This type or form of insurance is designed to protect the insured against loss that may result from accidents involving boilers, machines, or a wide variety of such items. This policy provides inspection services for apparatus covered therein which could prove to be as valuable as the reimbursement provision of the policy. Most states, as well as many counties and cities, require periodic inspections of all boilers and pressure machines. Therefore, a significant part of the premium, approximately 40 percent, is spent by the insurance company to carry out these inspections. Most governmental agencies accept certification of operational fitness of boilders and related machinery by insurance company representatives. 51

Boiler and machinery insurance may be placed into three groups.

1. Boilers and similar types of apparatus that involve latent energy generated by pressure, such as steam cookers, laundry apparatus and refrigeration appratus.

2. Engines and machinery, including flywheels, governors, gears,

steam and water turbines, and blowers.

3. Electrical apparatus, including motors, generators, and converters.52

The boiler and machinery policy covers both direct loss coverage, which protects against accidents, to insure objects, and liability

<sup>&</sup>lt;sup>51</sup> Ibid., p. 399.

<sup>52</sup> Ibid.

protection agianst loss caused to other persons or another's property.

The policy provides the following coverage.

1. The insured's property (both the insured object and also any other property) damaged by the accident.

2. The extra cost of repairing the damaged property as speedily as may be possible, including charges for overtime, express transportation, and so on.

 Loss to other persons' property damaged by the accident (and for the accompaying services of defense and investigation), to the amount for which the insured is found legally liable.

4. Bodily injuries caused by the accident, to the amount for which the insured is found legally liable. (Optional coverage feature available for a specific additional cost.)

5. The services of investigation and legal defense in connection with claims made against the insured under coverages 3 and 4. These expenses are covered regardless of the policy limit.<sup>53</sup>

The rates charged for boiler and machinery insurance are based upon "object rate," type of object insured, and "location charge." The location charge is necessary because inspections which are required to be made at different locations involve added expenses. However, rates for boiler and machinery insurance do not vary according to geographic location. <sup>54</sup>

Builders' risk insurance. This type of insurance coverage is designed to provide protection against loss during the construction of a building. Thus, a special type of insurance coverage is needed because the value of the property is not fixed but is constantly increasing as construction progresses. The coverage provided by builders' risk insurance is basically the same as that provided by a standard fire and extended coverage policy. Builders' risk may be

<sup>&</sup>lt;sup>53</sup>Ibid., p. 400.

<sup>&</sup>lt;sup>54</sup>Ibid., p. 402.

written in either of two forms: completed value form or reporting form. Under the completed value form the face value of the policy will be the value of the building upon completion. However, the policyholder is required to pay 50 to 55 percent of the applicable rate because the average amount of the risk over the entire construction period is considered. The reporting form of coverage provides for a small amount of coverage initially, with the amount of coverage increasing as the construction progresses. Under this arrangement the builder must submit monthly reports, stating the current value of the building, to the insurance company. If the building were totally destroyed, while under construction, the policyholder would be paid the value stated on the last monthly report submitted to the insurance company. <sup>55</sup>

# III. RELATED STUDIĘS

## National Studies

There are seven studies pertaining to property insurance for educational facilities that have been made at the national level. Five of the studies used data from public primary and secondary schools while two of the studies were concerned exclusively with higher education. The first four of the studies were made by or were under the sponsorship of the Association of Public School Business Officials.

The first study included the school districts of 380 cities in the United States and Canada during the ten-year period 1921-1930.

<sup>&</sup>lt;sup>55</sup>Athearn, p. 362; Angell, p. 160.

The study was designed to determine whether or not the insurance rates charged to schools for property coverage was fair when evaluated against premium/loss experience. Additionally, the study attempted to determine alternative methods of property insurance which would be less burdensome financially. 56

The study found that the districts included in the study had paid \$3.46 for fire protection for each \$1.00 returned in the form of settlement for losses. This record constituted a 28.7 percent premium/loss ratio. Thus, the insurance companies realized a 71.3 percent gross profit. The study also found that forty-nine city school districts and five states were operating self-insurance programs. The self-insurance programs were experiencing successful operation at a low cost. Conclusions of the study included: (1) the elimination of correctable hazards can result in reduced premiums and loss occurrences; (2) school facilities are a preferred class risk; (3) the high rates charged by stock insurance companies are causing school officials to seek alternative forms of protection such as mutual companies and/or self-insurance; and (4) dependable property appraisals, knowledge of property values, and complete records of insurance experience are essential in establishing adequate insurance programs for school facilities.<sup>57</sup>

<sup>56</sup> National Association of Public School Business Officials, Insurance Practices and Experiences of City School Districts, Bulletin No. 2 (Trenton, N.J.: National Association of Public School Business Officials, 1932), pp. 169-170.

<sup>57</sup> Ibid.

The second study covered the seven-year period 1931 to 1937 and involved schools located in 257 cities throughout the United States. The study was designed to determine the accuracy of the findings in the first study. Data collected by this study revealed that during the period covered by the study the premium/loss ratio was 26.9 percent compared to 28.7 percent in the previous study. The findings of the study reveal that stock insurance companies have taken advantage of the fact that schools are political by nature and their agents and brokers have brought pressure upon school officials to accept the high rates of stock companies for property coverage; that a gross profit of 73.1 percent on school property insurance is excessive; that public school buildings in the cities included in the study are a preferred risk; and that schools can remedy that situation by insuring with mutual insurance companies, or by establishing state insurance funds under the state government, or by establishing a self-insurance fund. 58

A third study covered the period 1938 to 1945 inclusive. The study was concerned with loss experience of schools, insuring practices, and the forms of coverage. The premium/loss ratio for the eight-year period covered by the study was 31.9 percent. This study's findings are consistent with the two previous studies in that it also found

An Investigation of Insurance Practices in Various Lines Covering United States City Schools, Bulletin No. 9 (Pittsburgh: National Association of Public School Business Officials, 1941), pp. 11-16.

school loss experiences have been consistently lower than the average for other types of risks.  $^{59}$ 

The primary findings of the study included: (1) trends are toward five-year term policies; (2) most districts now insure under blanket policies; (3) the use of 80 percent or 90 percent coinsurance was universally practiced; (4) rates during the period of the study showed a downward trend primarily due to the elimination of fire hazards; (5) approximately 60 percent of the districts require insurance companies to qualify on a basis other than state license; (6) most common qualification is a financial or general policyholder's rating of the company; (7) over one-fourth of the districts had no objective basis for awarding fire insurance; (8) officials were unsure if valuations were reliable and acceptable by agents; and (9) no well defined pattern as to frequency of building valuations existed.

The fourth study, under the sponsorship of the Association of School Business Officials, was conducted by Paul B. Salmon. The study was concerned with the principles and practices of school fire insurance of 378 school districts during the ten-year period 1946 to 1955.

Seport on School Fire Losses, 1938-45 (Kalamazoo, Michigan: Association of Public School Business Officials, 1948), pp. 3-7.

<sup>60&</sup>lt;sub>Ibid</sub>.

<sup>&</sup>lt;sup>61</sup>Paul B. Salmon, "Fire Insurance Principles and Practices in School Districts Employing Nationally Affilliated Business Officials" (unpublished doctoral dissertation, University of Southern California, 1957), pp. 354-357.

The findings of Salmon's study include: (1) the greatest number of districts were using insurance company representatives for property value determination rather than commercial evaluation engineers; (2) approximately two-fifths of the districts did not review and revise property values within a two-year interval; (3) 15 percent of the districts did not use the recommended "blanket insurance policy"; (4) districts almost universally made use of the coinsurance clause; (5) all but a small minority of the districts, 10 percent, made use of the extended coverage endorsement; (6) 70 percent of the districts used five-year term in purchasing insurance policies; (7) the budget plan of annual payments was found to be the most popular way of premium payment; (8) only about one-tenth of the school districts utilized competitive bidding to place their insurance; (9) two-thirds of the districts placed all their policies with stock insurance companies; (10) the district's claims were being handled in a satisfactory manner by both stock and mutual insurance companies; (11) the premium/loss ratio for the districts included in the study was 29.5 percent, whereas the average ratio for all property covered by insurance in the United States was 57.2 percent--approximately a twoto-one differential; (12) only one state, Texas, had accumulated public school loss experience data separately from other educational institutions; (13) almost one-fourth of the districts did not conduct regular fire inspections; (14) more than half of the districts did not conduct fire inspections as often as once a year; and (15) only

one-fifth of the districts conducted in-service training for those persons who performed the fire inspections.<sup>62</sup>

The study arrived at the following conclusions: (1) that stock companies continue to dominate educational insurance business; (2) broader coverage, for similar premiums, could be obtained if greater adoption was made of a broad coverage school insurance form; (3) school business officials are failing to carry out their responsibilities in the establishment of property values; (4) considerable savings could be realized on insurance premiums through the adoption of competitive bidding practices; and (5) schools have experienced a very low loss/premium ratio for an extended period of time resulting in excess profit for the insurance companies. 63

The following recommendations are among those made by Salmon:

(1) the services of a commercial appraisal firm should be used to develop an itemized appraisal of all district-owned buildings and equipment; (2) these values should be reviewed at intervals not in excess of two years; (3) districts should use exclusively the blanket type policy; (4) districts should use the extended coverage endorsement as a regular part of the original insurance policy; (6) the use of the vandalism and malicious mischief clause should be considered; (7) insurance should be bought under a five-year budget plan; (8) districts should draw up firm specifications for the coverage desired, the management characteristics and financial strength of the company required, and should place its insurance on a competitive basis; (9) companies and agencies wishing to bid should be subjected to scrutiny as to the degree of service and loss settlement satisfaction they have given in the past year; (10) districts should take specific action to seek rate reductions by all possible means; (11) all school districts should maintain a regular fire prevention inspection

<sup>62&</sup>lt;sub>Ibid</sub>.

<sup>&</sup>lt;sup>63</sup>Ibid., pp. 357-360.

program; (12) school districts should begin immediately to collect loss/premium ratio data; (13) business officials should seek to have public school buildings class-rated; and (14) careful attention should be given to the requirements of the coinsurance percentage.64

N. E. Viles, Sr. conducted a comprehensive study of school insurance experiences on a state-by-state basis and a national basis. The study covers a five-year period 1948-1952, the first five years after educational facilities were classified in a separate category for fire insurance rating. Viles found that the premium/loss ratios for school coverage on a nationwide basis on all types of insurance companies was approximately 35.3 percent. Additionally, the state of Tennessee had a premium/loss ratio of 56.3 percent, second highest of the forty-eight states included in the study. 65

The Consulting Division of Alexander and Alexander of New York undertook a study, in 1970, of certain insurance and risk problems for the University Insurance Managers Association (UIMA). The study had two major objectives: (1) to create a data base on loss exposure, losses, premiums, and insurance practices; and (2) to analyze the current risk and insurance climate of institutions with emphasis on methods of increased risk participation. Of the fifty major universities that were UIMA members, forty-one participated in the study.

<sup>&</sup>lt;sup>64</sup>Ibid., pp. 360-365.

Nelson E. Viles, <u>School Property Experiences on the State Level</u>, U. S. Department of Health, Education, and Welfare Bulletin No. 7 (Washington, D. C.: U. S. Government Printing Office, 1956), pp. 1-21.

Additionally, numerous insurance executives, underwriters, and insurance commissioners participated in the study.  $^{66}$ 

Based upon completed questionnaires and interviews the findings findings of the study were as follows.

1. The current situation for major universities is serious enough to warrant joint action.

2. Credible loss data is not available.

3. Leadership and initiative for change cannot be expected at this time for the insurance industry.

. The solution of insurance problems will have to be initiated

by the universities as a group.

- 5. Three major areas of concern exist: property insurance, liability insurance, including malpractice, and data processing exposure to loss. Of these three, property insurance is the most serious at this time and requires the most effort.
- 6. The universities themselves have not followed sound risk management principles:
  - a. Risks self-assumed have been minimal, especially when contrasted to financial capacity.

b. Loss prevention has been adequate.

- c. Internal risk management communication has been lacking.
- d. Accurate property values are generally unavailable.67

The study recommended the establishment of a University Property Pool to spread property losses among the participating members. The property pool would cover the first \$1,000,000 of loss. The pool would be funded from each participant based upon a percentage of the institution's operating budget. A fee would be paid to an insurance company which would serve as a depository for funds and as the administrator of the pool. Additionally, several recommendations

<sup>&</sup>quot;University Insurance Report 1970" (New York: The Consulting Division of Alexander and Alexander, October, 1970), p. 1. (Mimeographed.)

<sup>67</sup> Ibid., p. 2.

were pertaining to the improvement of risk management practices. <sup>68</sup>

Gwatney conducted a study to determine the amount of change in cost of institutional property insurance during the 1968-70 time period. Additionally, the study attempted to identify the factors that caused the cost change. The study included 161 private fouryear colleges and universities in the United States. The study found that the total cost of insurance policies increased 12.8 percent from 1968-69 to 1969-70. Part of the increase could be attributed to an increase in the number of buildings; however, in thirty institutions which had no increases in number of facilities insurance costs increased 25.5 percent. During the period covered by the study 14.9 percent of the institutions reported an increase in the amount of deductible insurance, thus preventing further cost increases. Gwatney concluded that the following factors contributed to the cost increase of property insurance coverage: arson, theft, nation-wide student unrest, added property, industry-wide rate adjustments, increases in property values, and inflation. 69

# State Studies

One of the earliest studies related to the insuring of educational property was made by William T. Melchior in 1925. The study was

<sup>68</sup> Ibid.

<sup>&</sup>lt;sup>69</sup>Gene H. Gwatney, "A Study of the Cost of Insurance Policies on Facilities in Selected Private Four-Year Colleges and Universities During the Academic Years 1968-69 and 1969-70," <u>Dissertation</u> Abstracts, XXXVI (1976), p. 3320-A.

an intensive investigation of insurance practices in the school districts of New York State and included a general investigation of insurance procedures in cities of the United States. Among the study's findings were: (1) practically all of the school districts carried fire insurance; (2) few school buildings exist in the State that are not hazardous; (3) prevention is the most efficient and economical insurance against the fire hazard; (4) the majority of schools insure with stock companies; (5) 55 percent of the districts did not maintain insurance records; (6) an evident relationship between the lack of records and poor insurance practices exists; (7) more than 50 percent of the districts gave little if any attention to the appraisal of buildings; (8) 66 percent of the buildings were insured under a co-insurance plan; (9) a three-year policy term is used to insure 92.1 percent of the buildings; (10) the premium/loss ratio experienced by the schools was 35.62 percent, providing 64.38 cents of each of each dollar to remain with the insurance companies. 70

Steinhauer conducted a study of fire insurance coverage practices of public school property in Pennsylvania in 1939. The study covered an eleven-year period, 1924-1925 through 1934-1935, and reported that the State school districts paid \$9,725,227 for fire insurance protection. The school districts received a total of \$3,328,721 or 35.8 cents per dollar expended in payment for fire losses.

<sup>70</sup>William T. Melchior, <u>Insuring Public School Property</u> (New York: Teachers College Columbia University, 1925), pp. 171-179.

Thus, the insurance companies were able to retain 64.2 cents of every dollar paid for fire insurance during the eleven-year period included in the study. 71

The study concluded:

The complete data and findings of this investigation present objective evidence to prove that school districts of the state can and should organize and operate a cooperative insurance association. Sound insurance principles would not be violated by an association of this type. A combination of districts, either as a county unit or state wide, would result in financial savings to these school districts. The experience as exhibited in this investigation is so stable that the financial ability of such associations (of districts) as measured by the amount of premiums expanded for fire protection, is more than sufficient to withstand the average annual loss and the possible deviation from this average. 72

In another research effort, Crim examined the insurance protection practices and costs of insurance coverage in Ohio. The study, covering the five-year period 1952-57, included 497 school districts which had 75.5 percent of the pupils attending Ohio's public schools during academic year 1956-57. The study found that the cost-receipt ratio for all insurance programs for all Ohio school districts was 22.7 percent. However, the cost-receipt ratio for property insurance on those districts included in the study was only 17.7 percent. The study also found the following trends were predominant: (1) three-year

<sup>71</sup> Milton Henry Steinhauer, "Fire Insurance on Public School Property in Pennsylvania," (unpublished doctoral dissertation, University of Pennsylvania, 1939), p. 3.

<sup>&</sup>lt;sup>72</sup>Ibid., p. 103.

and/or five year policies; and (2) the purchase of extended coverage endorsements.  $^{73}$ 

In 1960, Brent also conducted a study of the physical property insurance practices of 272 school districts in Oklahoma to determine means of providing greater protection and economy. He arrived at these conclusions: (1) property insurance affairs of many school districts are poorly managed; (2) the lack of frequency and properly conducted fire preventions resulted in higher premium/loss ratios; and (3) larger school districts conform more closely to the criteria of an adequate property insurance program than small districts. <sup>74</sup>

A few years later, Monger examined the feasibility of a state-operated insurance plan for Oklahoma. He found that the school districts had received sound protection and good service from the commercial insurance companies; however, the cost of this protection was greater than necessary. The study concluded that a proposed state-operated insurance program would be successful in providing property protection and would reduce property insurance costs as much as \$850,000 annually. 75

<sup>&</sup>lt;sup>73</sup>Kenneth Jacob Crim, "Insurance Practices and Costs Concerning Certain Board Owned Property in Ohio School Districts," <u>Dissertation</u> Abstracts, XXI (1960), pp. 103-104.

<sup>74</sup> Paul L. Brent, "The Practices of Oklahoma School Boards in the Insuring of School District Physical Property," <u>Dissertation</u> Abstracts, XX (1960), p. 2651.

<sup>75</sup> Doyle L. Monger, "A Proposed State-Operated Property Insurance Plan for Oklahoma's Public Schools," <u>Dissertation Abstracts</u>, XXIII (1962), p. 135.

Additionally in 1962, Cory investigated the feasibility of a self-insurance fund for Florida's public schools. Cory used premium/ loss data from the twenty-one year period 1940-1961 for the study. The schools paid \$13,345,417 for fire and extended coverage protection during the twenty-one year period, while collecting \$3,254,094 in benefits, resulting in a 24.37 percent cost-loss ratio. Additionally, the study reports that the cost-loss ratio for the period 1951-1961 was 17.6 percent for school facilities compared with a 35 percent cost-loss ratio for all property insured in the state during the same period. Among the conclusions of the study were: (1) Florida's public schools have paid excessive rates for property insurance protection; (2) the State's schools are a preferred risk and should be classified as such; and (3) estimated savings under a self-insurance program would be at least \$500,000 annually. <sup>76</sup>

In Iowa, Coffey's study of 441 public four-year high school district's insurance practices covered the five-year period 1960-1965. Among the findings of the study were: (1) stock companies outsold mutual companies in the majority of selected areas; (2) service was the primary consideration of 41 percent of the districts when selecting an insurance company; (3) 47.1 percent of the districts appraised property annually, with only 13.8 percent using professional appraisers; (4) payments of premiums were made on an equal annual

<sup>&</sup>lt;sup>76</sup>Paul Cory, "A Study of the Fire Insurance on Public Schools in Florida," <u>Dissertation Abstracts</u>, XXIII (1962), p. 1570.

basis by 92 percent of districts; (5) competitive bidding was practiced by 26.7 percent of the districts; and (6) premium/loss ratio for fire insurance coverage was 36.9 percent.<sup>77</sup>

In 1969 Shannahan conducted an inquiry to determine the feasibility and desirability of a state insurance fund for Arkansas' public schools. The study, covering the twenty-five year period 1941 to 1966, showed that Arkansas' public schools paid \$20,416,429 in property premiums and received \$5,818,899 for property losses. Thus, the premium/loss ratio for the twenty-five year period was 28.44 percent. Shannahan concluded that the public schools of Arkansas could have "free" insurance coverage within twenty years of the state fund's implementation. <sup>78</sup>

Holden's 1970 study of the policies and practices employed by the school districts of Montana in obtaining commercial property insurance protection, found very little uniformity in the insurance programs of the districts. The districts lacked uniformity in appraisal procedures, term of policy, and methods of placing insurance coverage. Holden concluded that state-wide insurance program would be possible in Montana. Losses for Montana's public school property, during the ten-year period preceding the study, were about \$260,000

<sup>77</sup> Marvin Gene Coffey, "Insurance Practices in Iowa Public High School Districts, 1960-1965," <u>Dissertation Abstracts</u>, XXVII (1966), p. 896-A.

<sup>&</sup>lt;sup>78</sup>James N. Shannahan, "The Feasibility and the Desirability of a State Property Insurance Fund for the Arkansas Public Schools," <u>Dissertation Abstracts</u>, XXX (1969), p. 501-A.

with premiums amounting to approximately \$1,000,000.79

In another 1970 research effort, Clinch examined the feasibility of establishing a state fire insurance program for Delaware's public schools. The study gathered data from the base period 1962 to 1966. Clinch found that the Delaware public school properties were an excellent risk for a full state self-insurance plan based upon a premium/loss ratio of 10.1 percent during the five-year period 1962 to 1966.

In 1972, Froehlich conducted a study to determine the effect that administrative practices, bureau rating factors, and loss experiences had upon the property insurance rates of Nebraska's public schools. The findings of the study included: (1) lower property rates were present in districts which purchased insurance through competitive bidding, used PIP rates on three-year periods of coverage, had regular building inspections, and conducted property appraisals annually or within a three-year period; (2) districts with lower premium/loss ratios have lower premium rates and (3) administrative practices were the most influential determinant of property rates in schools with low rates. 81

<sup>79</sup>Harold H. Holden, "State Fire Insurance for Public School Property in Montana," <u>Dissertation Abstracts</u>, XXXI (1971), p. 4419-A.

<sup>&</sup>lt;sup>80</sup>Jack B. Clinch, "State Plan for Public School Property Insurance in Deleware," Dissertation Abstracts, XXXI (1970), p. 2038-A.

Robert B. Froehlich, "An Analysis of the Determinants of Property Insurance Rates in Selected Nebraska Public School Districts from 1965 through 1970," <u>Dissertation Abstracts</u>, XXXII (1972), pp. 6035-A and 6036-A.

Nichols investigated the economic feasibility of a state self-insurance program for Tennessee's public schools. The study found that the premium/loss ratio experienced by Tennessee's public schools during the twenty-year period 1949 to 1968 was 41 percent. <sup>82</sup> Additionally, it was found that if a state self-insurance plan had been established in 1949 a reserve fund of \$16,546,651 would have been accumulated by school year 1968-69. Under a state fund property insurance coverage would have cost \$3,723,447, as compared to \$20,520,813 under commercial company coverage. <sup>83</sup>

Stenzel did research to determine whether a state plan of self-insurance for fire and extended coverage of public school property in Colorado would be desirable and feasible. Among the conclusions of the study were the following: (1) The successful operation and cost ratios of self-insurance programs in other states would indicate that a similar program in Colorado would also prove to be successful. (2) The establishment of a self-insurance program for Colorado's public school would be opposed by the insurance industry. (3) School administrators were dissatisfied with present insurance programs and services. (4) The inviolability of the self-insurance fund and provisions for compliance with safety standards should be made an integral part of a self-insurance program. <sup>84</sup>

<sup>82</sup> Nichols, p. 71.

<sup>&</sup>lt;sup>83</sup>Ibid., p. 74.

Donald H. Stenzel, "A Study of Options About A State-Level Self-Insurance Program for Colorado Public Schools," (unpublished doctoral dissertation, University of Northern Colorado, 1973), pp. 64-66.

Dutton examined the physical property insurance practices of the thirteen school systems which compose the Upper East Tennessee Educational Cooperative. The study gathered data from the twenty-year period 1954-55 through 1973-74. Data from the twenty-year period revealed that the premium/loss ratio for the school systems of the Upper East Tennessee Educational Cooperative averaged 23.7 percent. Thus, the commercial insurance companies retained 76.3 percent of the total premiums paid or 26.3 percent more than the percentage that is considered an equitable return for commercial companies. Among Dutton's findings were: (1) the rates paid for property insurance coverage, by Cooperative members, were excessive, and (2) the Cooperative school districts could have operated a partial self-insurance fund in connection with deductible commercial insurance at a considerable savings.

In 1975, Ray conducted a study to ascertain the feasibility of a state self-insurance fund for Mississippi. The study gathered data from 150 school districts of the state over a ten-year period 1964 through 1973. During this period the state was struck by the Hurricane Camille. For the ten-year period 1964-1973 the premium/loss ratio was 83.1 percent; however, if 1970 is excluded, the year of Camille, the premium/loss ratio for the remaining nine years is 37.4 percent. 87

<sup>&</sup>lt;sup>85</sup>Dutton, p. 144.

<sup>&</sup>lt;sup>86</sup>Ibid., p. 147.

<sup>&</sup>lt;sup>87</sup>Olon E. Ray, "Property Self-Insurance for the Public Schools of Mississippi: A Feasibility Study," (unpublished doctoral dissertation, University of Southern Mississippi, 1975), p. 48.

Among Ray's findings are: (1) several school districts in Mississippi have paid excessive rates for property insurance; (2) there esists great differences in the rates paid for property insurance by Mississippi's school districts; and (3) a state sponsored self-insurance fund could provide the desired insurance coverage for the schools of Mississippi at a lower rate than that presently paid to commercial companies. 88

Brooks made an inquiry to determine the feasibility of a state insurance fund for Kentucky's public schools. The study reveals that the public schools of Kentucky experienced a premium/loss ratio of 51.62 percent during the nineteen-year period 1955-56 through 1973-74. 89 However, Brooks states that despite this relatively high premium/loss ratio a state self-insurance fund would have been successful in the nineteen-year period accumulating a reserve of approximately thirteen million dollars, and when projected twenty-five years into the future, 1974-1999, a reserve of over sixty-nine million dollars would be realized. 90

Angstadt's 1975 examination of property insurance practices in selected Indiana school corporations lists the following findings.

<sup>&</sup>lt;sup>88</sup>Ibid., pp. 114-115.

<sup>&</sup>lt;sup>89</sup>C. Michael Brooks, "The Feasibility of a State Insurance Fund for Kentucky's Public Schools," (unpublished doctoral dissertation, University of Kentucky, 1975), p. 154.

<sup>&</sup>lt;sup>90</sup>Ibid., p. 160.

(1) The premium/loss ratio for the five-year period of the study, 1969-70 through 1973-74, was 15.22 percent. (2) Competitive bidding was used to place insurance coverage by 75 percent of the districts. (3) Approximately 13 percent of the districts experienced difficulty in finding companies willing to insure their property. (4) A considerable cash reserve would be available had the school corporations formed a self-insurance fund during the 1969-70 school year. 91

## IV. STATE INSURANCE LAWS

The <u>Tennessee Code Annotated</u> sets forth those laws which control insurance companies transacting business within the state. The laws governing insurance companies and insurance transactions within the state are rather general in scope and the development of specific guidelines is delegated to the Commissioner of Insurance and Banking. The Governor of Tennessee appoints the Commissioner of Insurance and Banking to a term which expires with the election of the next governor; however, the commissioner serves at the pleasure of the governor who can request his resignation at any time. <sup>92</sup> The Commissioner of Insurance and Banking is authorized to promulgate rules and regulations to govern the writing of insurance. The rules developed by the commissioner have the force and effect of the law. <sup>93</sup>

<sup>91</sup> James W. Angstadt, "A Comparison of Insurance Programs on the Physical Property Coverage in Selected Indiana School Corporations," Dissertation Abstracts, XXXVI (1976), p. 4883-A.

<sup>&</sup>lt;sup>92</sup>Tennessee Code Annotated (New York: The Bobbs-Merrill Company, Inc., 1968), Vol. II, Para. 4-302, p. 270.

<sup>93</sup> Ibid., Vol. X, Para. 56-216, p. 221.

The rates charged for insurance coverage must be based upon a sound plan or method which has been approved by the commissioner. The law specifically states:

After December 1, 1945 no rate, premium, charge, schedule, rating plan or method, rule, by-law, agreement or regulation shall become effective or shall be charged, applied or enforced in this state by any insurer or rating organization, until it shall have been first filed with and approved by the commissioner as fair, reasonable, adequate and not unfairly discriminatory, but a rate produced by a schedule, rating method or rule, all of which have been specifically approved by the commissioner need not be further approved by him.94

Furthermore, the commissioner may conduct hearings to determine the fairness, adequacy, and reasonableness of rates. Additionally, hearings may be held to determine whether or not the insurance practice has been unfairly discriminatory. The commissioner may hire experts, as needed, to assist him with the hearings.  $^{95}$ 

The Code specifies the types of property insurance that is authorized to be written in the state. The Code authorizes the issuance of fire and extended coverage insurance. <sup>96</sup> In order for the commissioner to determine the operating experience of companies transacting business within the state, the commissioner requires reports on all fire losses.

Every fire insurance company transacting business in the state is required to report to the commissioner, . . . all fire losses on property insured in such companies, within the state showing the

<sup>&</sup>lt;sup>94</sup>Ibid., Vol. X, Para. 56-508, pp. 287-288.

<sup>&</sup>lt;sup>95</sup>Ibid., Vol. X, Para. 56-513, p. 289.

<sup>&</sup>lt;sup>96</sup>Ibid., Vol. X, Para. 56-219, pp. 225-226.

owner and occupant of the premise burned, the date of the fire, location, cause of fire, occupancy, amount of insurance, sound value of property, and the amount of loss paid.  $^{97}$ 

This system of reporting fire losses also assists in the monitoring of discriminatory practices that may surface in the fire insurance field. The Code prohibits discrimination in rates between risks that are essentially the same.

No fire insurance company, casualty or indemnity insurance company, or other insurer, or its agents, against the risks of fire, lightning or windstorm, casualty, or indemnity contracts, shall fix, charge or collect any rate or premium of insurance upon property in this state which discriminated unfairly between risks in the application of charges and credits, or which discriminates unfairly between risks of essentially the same hazards and having substantially the same degree of protection against fire, or other hazards.98

Those facilities which are fire resistive by nature of construction are given special premium rates. The state fire marshal has the responsibility for establishing fire resistance ratings for such items of construction as walls, partitions, column protections, etc. The marshal is responsible for publishing a regulation which specifies the particular ratings of such materials. 99

Property may not be insured for a value that exceeds the fair value of such property. The Code attempts to enforce this provision

<sup>&</sup>lt;sup>97</sup>Ibid., Vol. IX, Para. 53-2414, p. 344.

<sup>&</sup>lt;sup>98</sup>Ibid., Vol. X, Para. 56-1223, pp. 426-427.

<sup>&</sup>lt;sup>99</sup>Ibid., Vol. IX, Para. 53-2534, p. 388.

by requiring inspection of the insured property by the agent writing the fire contract.

Every agent, within ninety days after making or writing any contract of fire insurance on any building or structure in the state, shall cause the same to be personally inspected; and no company, and no officer or agent thereof, and no insurance broker, shall knowingly issue, negotiate, or renew any fire insurance policy upon property or interests therein within the state of an amount which, with any existing insurance thereon, exceeds the fair value of the property. 100

#### V. SUMMARY

In summary, there are risks that confront each and every educational institution. Because of the uniqueness of each institution these risks should be identified and evaluated on an individual basis and a suitable method chosen for treating each risk. Methods by which risks are treated include: the reduction or elimination of factors that contribute to the risk; assumption of the risk under the noninsurance concept; a self-insurance program; and commercial insurance coverage. Although there are many arguments for and against each alternative, these arguments should be carefully considered in a particular setting before choosing an alternative.

Studies conducted at both the national and state levels indicate that educational institutions and systems have received satisfactory service and protection from commercial insurance companies. However, these studies indicate that the cost of commercial insurance has been excessive. Feasibility studies have indicated that state or group

<sup>100</sup> Ibid., Vol. X, Para. 56-1137, p. 399.

self-insurance programs are a cost-effective insurance alternative for educational institutions.

State insurance laws in Tennessee are general in scope and authorize the Commissioner of Insurance and Banking to promulgate rules and regulations to govern the writing of insurance within the state. The laws permit property insurance to be written by both stock insurance companies and mutual insurance companies and does not limit an educational institution's insurance to be purchased from a particular type of company. State law prohibits rate discrimination between risks that are essentially the same and the insuring of property for an amount greater than its fair value.

### CHAPTER III

## SUMMARY OF STATE SELF-INSURANCE PLANS

## I. INTRODUCTION

Several states have established government sponsored selfinsurance plans or programs to provide protection for the properties
of the state, county, and/or local governments. Many of these
programs were established specifically to reduce the cost of insurance
coverage. State self-insurance programs may vary somewhat with each
state in regard to such factors as facilities covered, types of
coverage, deductible amounts, mandatory or optional participation,
etc. This study reviews self-insurance programs in only states of
the Southeastern United States which include coverage on educational
facilities. These programs were selected for review because they
represent a wide spectrum of organizational structures and types of
coverage. Additionally, the experience of the programs in this
geographic area would probably most closely approximate that of an
association of private colleges and universities of Tennessee.

#### II. TENNESSEE PROPERTY INSURANCE PROGRAM

Tennessee established a state self-insurance program in 1971 to provide insurance against casualty losses to buildings and contents. The program also establishes a reserve fund to cover unexpected losses and a policy providing catastrophe coverage with an aggregate

deductible of \$1,500,000 per year. The self-insurance program covers all state-owned buildings and contents, including higher educational facilities, where values exceed \$5,000. The valuation of facilities are established at actual value. 1

The state self-insurance plan provides that any loss under \$5,000 is to be absorbed by the department in which the loss occurred. The state's excess coverage policy provides that loss amounts in excess of \$5,000 per location per occurrence are to be accumulated toward the annual aggregate retention of \$1,500,000. Thus, the state does not recover losses unless the annual aggregate is exceeded, and then only for the excess of \$5,000 per occurrence. The program provides "all risk" property damage and boiler explosion (with the exception of the University of Tennessee). As of June 30, 1975 the amount of coverage under the state self-insurance program totaled \$1,599,420,400, with those facilities and/or contents valued under \$5,000 not included. During the four years that the self-insurance program has been in existence, July 1, 1971 to June 30, 1975, its cost has been \$2,839,258.88. Based upon the property value presently covered by the self-insurance program, "manual rates" for commercial coverage for the four year period would have been \$7,291,331. Thus, Tennessee's state selfinsurance program has resulted in a reduced cost of \$4,452,072 for property coverage for the four-year period of its existence.

<sup>1&</sup>quot;Report-Property Insurance Program," (Nashville: Department of Finance and Administration, June 30, 1975), p. 1. (Mimeographed.)

<sup>&</sup>lt;sup>2</sup>Ibid., pp. 1-2.

During the summer of 1948 the Insurance Commissioner of North Carolina, without public hearings, approved a 25 percent increase in the fire insurance rates of public schools of the state. Unable to get relief from the commissioner's rate increase, the State Board of Education sought and received authority from the 1949 General Assembly to establish and operate a school property insurance fund. Thus, the North Carolina Public School Insurance Fund began operating on July 1, 1949.

The Fund was established by a loan of two million dollars from the State Literary Fund, a fund which provided small loans to local school systems for building purposes, with repayment to be made at a future time. The State Literary Fund was repaid the two million dollars in February 1962, without any of the loan ever being needed to pay losses and the Fund is clear from all its indebtedness. Two benefits of the establishment of the Fund that were readily apparent were the reduced cost of insurance coverage, and improved fire inspection services. Closely following the establishment of the Fund commercial insurance companies reduced rates charged on school property, other reductions were to follow. The Fund currently budgets approximately one-half of its funds for fire inspection activities.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup>"North Carolina State Board of Education Public School Insurance Fund," (Raleigh, N.C.: North Carolina State Board of Education), p. 1. (Mimeographed.)

<sup>&</sup>lt;sup>4</sup>Ibid., pp. 1-2.

The public school administrative units in the state participate in the Fund on a voluntary basis. In 1976 there were 145 public school districts within the state, 100 county and 45 city, of which 104, with approximately 65 percent of the school property value, participate as members of the North Carolina Public School Insurance Fund. In 1963 the General Assembly enacted Article 4 of the Public School Laws of North Carolina which broadened membership in the Fund to include community colleges, technical institutes, and industrial education centers. 6

The Public School Insurance Fund provides protection for damages resulting from fire, lightning, windstorm, hail, or explosion. Participating local school districts may insure their property for either 100 percent or 75 percent of its insurable value. All school districts currently are insured for 100 percent coverage. The insurable value of property covered by the Fund is replacement cost, less normal depreciation and non-insurables such as foundations and excavation. 7

The Public School Insurance Fund is protected against excessive losses by reinsurance policies. The director of the fund explained the reinsurance as follows.

<sup>&</sup>lt;sup>5</sup>Letter from Thomas B. Winborne. Director, Division of Insurance, North Carolina State Board of Education, August 12, 1976.

<sup>&</sup>lt;sup>6</sup>Public School Laws of North Carolina, Article 4, Para. 115A-34, P. 4. (Mimeographed.)

<sup>&</sup>lt;sup>7</sup>Letter from Winborne.

I would like to add here that we have a reinsurance contract which insures the excess of our liability above \$400,000 each and every location, each and every loss, with a \$2,000,000 limit. This policy works similar to a deductible automobile policy; we assume the first \$400,000 liability and our reinsurance takes over from that point on.8

Each building insured with the Fund is inspected by engineers on an annual basis prior to the renewal of the policy. The insurance rate each school must pay for insurance coverage is based upon the findings of the engineers conducting the annual inspection. The Fund issues a specific insurance policy on each building and the policy has no coinsurance clause. 9

The North Carolina Public School Insurance Fund experienced a net profit of \$825,979.52 during the fiscal year (FY) ending June 30, 1975, an increase in profits of over \$80,000 from the previous year. <sup>10</sup> This surplus was realized in a year that the percent of fire loss to earned premiums was 67.8 percent, a ratio considered unprofitable by commercial insurance companies. <sup>11</sup> However, the Fund was able to realize a profit for the year because it was able to keep administrative costs much lower than those of a commercial company, only 6.45

<sup>8&</sup>lt;sub>Ibid.</sub>

<sup>9</sup> Ibid.

<sup>10&</sup>quot;State Board of Education Public School Insurance Fund Financial Report" (Raleigh, N.C.: North Carolina State Board of Education, June 30, 1975), p. 2. (Mimeographed.)

<sup>&</sup>lt;sup>11</sup>Ibid., p. 14.

percent of income during 1975. The FY 1975 earnings increased the surplus of the Fund to \$7,438,380.68, as of June 30, 1975. 12

The North Carolina Public School Fund has apparently benefited all public schools of the state. The director offers the following summary.

... since March, 1949, when the General Assembly authorized the establishment of a self-insurance program for our schools, the rates on public schools of North Carolina have been reduced from 35.2% to 40%. This savings has benefited all the public schools of the state. The schools insuring their properties with 'The Fund' have received even greater saving, as we haven't found an administrative unit that couldn't save by insuring with 'The Fund.'

The insurance program, as set up by 'The Fund' is the best the schools of North Carolina have ever had. The engineering and inspection service is by far the best schools have had, and in most instances, the first such services for the schools.13

## IV. THE INSURANCE SINKING FUND OF SOUTH CAROLINA

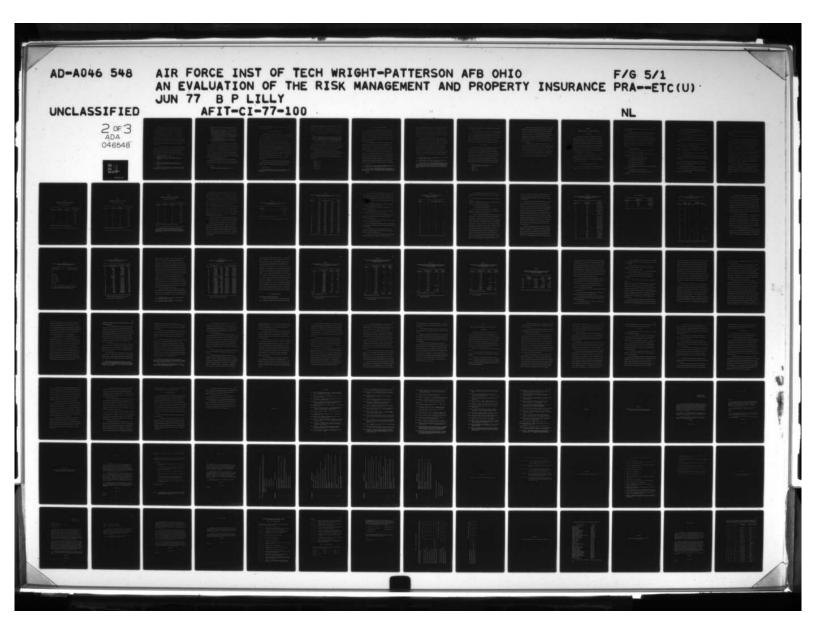
The Insurance Sinking Fund of South Carolina, established in 1900, was undoubtedly the earliest fund established by a state to cover losses on state property. <sup>14</sup> Legislation establishing the Fund requires coverage on all state (including higher educational facilities), county, and public school buildings and the contents thereof. Participation in the Fund by incorporated municipalities is optional. <sup>15</sup>

<sup>&</sup>lt;sup>12</sup>Ibid., p. 5.

<sup>13&</sup>quot;Fire Insurance Rate History in North Carolina Since May, 1948" (Raleigh, N.C.: North Carolina State Board of Education), p. 2. (Mimeographed.)

<sup>14&</sup>quot;The Establishment of the South Carolina Sinking Fund Commission and of the Insurance Sinking Fund" (Columbia, S.C.: Division of General Services), p. 1. (Mimeographed.)

<sup>15</sup> Ibid.



Property insured by the Fund is covered against loss from fire, extended coverage, boiler loss, sprinkler leakage, vandalism and malicious mischief. An additional endorsement offered by the Fund, "Differences in Conditions," covers loss from earthquake, flood, collapse, subsidence, sonic boom, tidal wave and water damage. 16

The Fund is administered by the South Carolina Division of General Services. Its director is responsible for the management of the various state sinking funds, including the Insurance Sinking Fund. The Division of General Services is divided into five functional areas, one of which is the State Insurance Fund managed by the Chief of Insurance. 17

The Fund has been able to offer insurance coverage at a vastly reduced rate to its policyholders. The current fire and extended coverage rates are 50 percent of the manual rates charged by stock and mutual companies. <sup>18</sup> The Casualty Claims Administator of the Fund states that low rates are possible in part due to the following factors.

- 1. Elimination of acquisition costs.
- 2. Favorable tax position.
- 3. Reduction in investment in office space, equipment, etc.
- 4. Elimination of profit from long or short term financial statement.

<sup>16</sup> Report of the Division of General Services (Columbia, S.C.: State Budget and Control, State of South Carolina, 1975), p. 18.

<sup>&</sup>lt;sup>17</sup>Ibid., p. 11.

<sup>18</sup> Letter from W. Linton Phillips, Jr., Casualty Claims Administrator, Division of General Services Budget and Control Board, State of South Carolina, August 18, 1976.

5. Due to centralization of operation, requires no supervision at a higher level, sharply reducing the clerical/expense ratio.

6. Due to our operation being confined to one jurisdiction and small geographic area the effectiveness of our management underwriting, rating system, claims administration is much

more efficient than a multi-state operation.

7. Operating expense is further reduced by the use of state automobiles, limited travel expenses through use of per diem, no entertaining or other forms of market cultivation, cost of policy writing greatly reduced through use of State Agencies, and loss prevention service is performed by other State Agencies to mention a few.

8. . . . the State usually attracts a more stable type of employee than does the insurance company. The benefits derived from this tend to increase the effectiveness of the

individual employee contribution.19

Improved coverage and services continue to be realized by the Fund. The Fund's fire and extended coverage reinsurance, placed with commercial companies, has been reduced from \$250,000 to \$175,000 with a new five-year contract which became effective in 1974. Additionally, a three-year boiler and machinery contract, placed on a competitive bid basis, resulted in a substantial reduction in premium cost and a charge in coverage from actual cash value to repair and replacement. Engineering and inspection services are provided to all agencies holding policies with the Fund by the reinsurers. <sup>20</sup>

The fire and extended coverage in force by the Insurance
Sinking Fund exceeds two billion dollars and is secured by a reserve of
over forty-five million dollars. During fiscal year 1975, the Fund

<sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup>Report of the Division of General Services, p. 18.

realized an income of \$2,308,841.12 on investments and a net operating income of \$4,111,655.88.<sup>21</sup>

### V. FLORIDA FIRE INSURANCE FUND

The State of Florida established the Florida Fire Insurance Fund to provide a program of self-insurance for all state-owned buildings and contents over fifty dollars in value, including higher educational facilities. The Fund provides coverage against loss from fire and hazards normally covered by extended coverage insurance; however, boiler and machinery coverage is excluded. Premium rates charged for insurance coverage are based upon losses accruing to the fund, cost of reinsurance, and the cost of managing the program. Each state agency must pay for the insurance coverage from their departmental operating budget according to the coverage obtained from the fund. The Department of Insurance is responsible for inspecting all facilities insured by the Fund and may order hazardous conditions to be immediately remedied. An annual report of fire inspections, giving specific taken to reduce fire hazards, must be submitted to the governor and state legislature. <sup>22</sup>

The Fund issues a certificate of insurance to each state agency indicating the specific name of the agency and the coverage provided. For the settlement of losses the Fund insures buildings for the

<sup>&</sup>lt;sup>21</sup>Ibid., pp. 18-19.

<sup>22&</sup>quot;State of Florida Self-Insurance Program" (Tallahassee, Fla.: Department of Insurance, Division of Risk Management), pp. 1-2. (Mimeographed.)

replacement cost, less depreciation and contents for actual cost new, less depreciation. Specific perils covered by the Fund include damage by fire, lightning, windstorm, explosion, removal, civil commotion, riot, hail, aircraft, riot attending a strike, vehicles, and smoke. 23

The Fund has a loss deductible clause which is explained as follows:

All insurance will be based on a \$100 Disappearing Loss Deductible Clause . . . the Fund shall be liable only when such loss in each occurrence exceeds \$100. When loss is between \$100 and \$500 this Fund shall be liable for 125% of loss in excess of \$100 and when loss is \$500 or more, this loss deductible shall not apply.<sup>24</sup>

The Fund does not require facilities or contents to be insured for specific percentages of value; it has a coinsurance clause. The coinsurance clause states: "the amount of claim paid will be determined by the relationship between the total actual cash value at the time of the loss and the value actually insured at that location." 25

Commercial reinsurance is carried by the Fund to protect it against aggregate losses in any one policy year that exceed 2.5 million dollars. The Fund completed fiscal year 1974 with a surplus of \$6,556,274.45 and an experienced fire loss to earned premium ratio of 21.6 percent. 27

<sup>&</sup>lt;sup>23</sup>Ibid., pp. 6-9.

<sup>&</sup>lt;sup>24</sup>Ibid., p. 9.

<sup>&</sup>lt;sup>25</sup>Ibid., p. 10.

<sup>&</sup>lt;sup>26</sup>Ibid., p. 15.

<sup>&</sup>lt;sup>27</sup>Ibid., p. 20.

### VI. STATE INSURANCE FUND OF ALABAMA

The State Insurance Fund of Alabama was established on October 1, 1923 to insure state-owned buildings and contents against damage from fire and tornado. Coverage of the Fund has since been amended to include damage against the perils of fire, lightning, windstorm and hail. Coverage is mandatory for all state-owned buildings, buildings owned by state agencies, buildings financed by state funds, and school buildings and contents. 29

The State Insurance Fund was established through a \$100,000 appropriation which was to serve as an emergency fund only after surpluses accumulated by the Fund had been exhausted by losses and management expenses. Thus, the State of Alabama assumes no risk for property loss under the Fund beyond the \$100,000 appropriation. 30

The Fund insures nine categories of facilities and contents including: capitol and department buildings, eleemosynary institutions, institutions of higher learning, board of corrections buildings, county high and elementary schools, ABC stores, city schools, Hill Burton hospitals, and miscellaneous facilities. The total value of all property included in the Fund is \$1,607,871,800 with fire insurance coverage of \$1,291,758,205 and an extended coverage of \$1,284,610,456

<sup>28</sup> George S. Hanson, <u>State and Municipal Self-Insurance</u> (New York: National Association of Insurance Agents, 1954), p. 26.

Nelson E. Viles, School Property Insurance Experiences at State Level, U. S. Department of Health, Education, and Welfare Bulletin No. 7 (Washington, D.C.: U. S. Government Printing Office, 1956), p. 26.

<sup>30</sup> Ibid.

written on the property in 1974-75. The Fund's coverage is written on 11,452 buildings of which 3,043, with a value of \$732,369,750, are institutions of higher education and 5,253 buildings with a value of \$586,910,300 are county and city primary and secondary schools. Thus, educational facilities comprise approximately 36.5 percent of the total value of property insured by the Fund. 31

The Department of Finance is the governmental agency charged with the overall administration of the Fund. The Department of Finance is subdivided into divisions, one of which is the State Insurance Fund, with a manager who directs the activities of the Fund. Coverage under the Fund for higher educational facilities is limited to fire and extended coverage on a first dollar basis, with the Fund purchasing excess reinsurance to protect against catastrophe. 32 Legislation establishing the Fund limited the maximum operating expenses to 4 percent of premium income; however, in 1957 the allowable percentage was increased to 6 percent. 33 During the fiscal year 1975, the Fund's

<sup>31</sup> Annual Report State Insurance Fund (Montgomery, Ala.: Skinner Printing Company, 1975), p. 10.

<sup>32</sup> Letter from Thomas D. Weston, State Insurance Fund Manager, Department of Finance, State of Alabama, August 26, 1976.

<sup>33</sup> State Insurance Fund, State Insurance Fund of Alabama, Reprint from Code of Alabama 1940, 1955 and 1957 supplements (Charlottesville, Va.: The Michie Company, 1958), p. 6; cited by C. Michael Brooks, "The Financial Feasibility of a State Insurance Fund for Kentucky's Public Schools," (unpublished doctoral dissertation, University of Kentucky, 1975), p. 72.

operating expense was \$175,610.51, or approximately 3.5 percent of the total premiums written. <sup>34</sup>

The Alabama State Insurance Fund completed fiscal year 1975 with a reserve of \$14,698,676.88, an increase of \$1,201,392.43 during the year. The assets of the Fund are invested primarily in governmental bonds at the municipal, state, and federal levels. The Alabama State Insurance Fund has realized this financial success in spite of a rather high loss ratio, 56.66 percent for fire and 74.21 percent for extended coverage, during the ten-year period 1966 through 1975. 37

### VII. SUMMARY

State self-insurance programs have been established in a number of southeastern states in response to the high cost of commercial insurance coverage and/or the difficulty experienced in obtaining commercial coverage. The funds have experienced success in providing needed coverage and related services at a cost less than that charged by commercial insurance companies. The experience of state self-insurance funds in the southeastern states range from The Insurance Sinking Fund of South Carolina which was established in 1900 to the Tennessee Property Insurance Program which was established in 1971.

<sup>&</sup>lt;sup>34</sup>Annual Report State Insurance Fund, p. 6.

<sup>&</sup>lt;sup>35</sup>Ibid., p. 7.

<sup>&</sup>lt;sup>36</sup>Ibid., p. 9

<sup>&</sup>lt;sup>37</sup>Ibid., p. 11.

Economy in operation has been achieved by state self-insurance funds through centralized inspection and appraisal practices combined with a very low operating expense, usually 3 to 6 percent of earned premiums. This low operating expense is achieved in part because commissions and bonuses, such as those paid by commercial companies to salespersons, are not required in state self-insurance programs. Additionally, income derived from investments are used to reduce rates and/or increase reserve funds which are available to protect policy-holders against loss.

Coverage under state self-insurance programs range from mandatory coverage for all state-owned, state-financed, state-operated, and educational facilities to optional coverage for certain categories of facilities. Reinsurance with commercial companies is a common practice used by most funds to protect its reserve against catastrophic losses. Additionally, the use of a deductible clause, whereby the insured assumes a specific loss before the state fund assumes liability, is a prevalent practice among state self-insurance funds.

#### CHAPTER IV

### PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

#### I. INTRODUCTION

The purpose of this chapter of the study was to present, analyze and interpret risk management and property insurance data collected by questionnaire. The questionnaire was forwarded to the thirty-seven private colleges and universities in Tennessee which were both members of the Tennessee Council of Private Colleges and were accredited by the Southern Association of Colleges and Schools. Responses were received from twenty-eight or 75.68 percent of the institutions. To achieve this response rate, a follow-up letter enclosing a second copy of the questionnaire and telephone contact with institutional officials were necessary.

The chapter is organized into two divisions: Presentation and Analysis of Data and Interpretation of Data (consisting of two subdivisions--1. Risk Management and Property Insurance Data and 2. Suitability of Tennessee's Private Colleges and Universities for a Self-Insurance Association).

## II. PRESENTATION AND ANALYSIS OF DATA

The data presented and analyzed in this chapter were collected by means of a questionnaire (Appendix E). The presentation and

analysis of the data are organized in the same sequence as collected by the questionnaire.

The institutional representatives were asked to respond as to whether or not their institution met the first twenty-two risk management and property insurance criteria. The final criterion, number twenty-three, was evaluated by the panel of experts using the institution's annual operating budget and the deductible clause of the property insurance (Appendix G). The following twenty-three criteria (also found at Appendix D) were used to evaluate the risk management and property insurance practices of Tennessee's private colleges and universities.

Your college or university:

- 1. Has appointed a specific person to develop and administer all risk management and insurance programs.
- 2. Has developed a statement of policy for the institution pertaining to insurance and risk management.
  - 3. Has identified the probabilities of loss.
  - 4. Has decided the method of treating risk.
  - 5. Has studied risk funding methods.
  - 6. Has taken steps to avoid some risks.
  - 7. Has taken steps to spread risks.
- 8. Has developed a formal program designed to identify, prevent, and/or reduce risks.
  - 9. Has determined level fo risk assumption.
- 10. Has determined those risks which can be or should be transferred.

- 11. Has studied and evaluated past loss experience.
- 12. Has studied and evaluated water supplies, fire fighting, and fire prevention capabilities.
- 13. Has reviewed plans for construction and remodeling and included risk management recommendations.
- 14. Has a plan of evaluation of all new construction planning relative to fire protection engineering, using a professional outside authority.
- 15. Has enforced rules and procedures and has monitored and measured the results of the risk management program.
- 16. Has prepared an annual report for the board of trustees, directors, and officers concerning risk management and property insurance cost-effectiveness.
- 17. Has consulted with similar institutions as to both common problems and common solutions thereto.
- 18. Has a staff education program designed to promote awareness of risk management policies and practices and risk reduction or elimination techniques.
- 19. Has developed a self-insurance "guideline" (on a per occurrence or annual aggregate basis) related to the institution's financial resources and spread-of-risk.
- 20. Has undertaken a formal risk control/property conservation program with annual physical inspections of major facilities.
- 21. Has an ongoing system of inspections of buildings including evaluation of all occupancy changes.

- 22. Has a plan of evaluating expenditures to reduce risk including the cost-effectiveness and the authority to authorize expenditures.
- 23. Has self-assumed risk in accordance with its financial capacity.

Data pertaining to the risk management and property insurance criteria are presented and analyzed by grouping the twenty-eight institutions into three categories based upon the size of the institutional operating budget. Institutions were categorized as follows:

Category I - annual operating budget under \$2 million; Category II - annual operating budget between \$2 million and \$3 million; and

Category III - annual operating budget over \$3 million. The purpose of this subdivision is twofold: first, to permit institutional officials to compare their risk management and property insurance programs to those of other institutions of similar size and resources; and secondly, to determine whether or not there are differences in the risk management and property insurance practices of institutions based upon the resources of the institution. Individual institutional responses to each criterion can be found at Appendix H.

The data are presented to show the number of criteria met by each institution. The institutions are grouped by category, and the percent of criteria met by each institution along with a category percent is computed to allow each group to be compared to other groups as well as to the total group. These data are shown in Tables I, II, and III.

TABLE I

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE SURVEY - PART I

CATEGORY I INSTITUTIONS

| Institution | Number of<br>Yes Responses | Number of<br>No Responses | Percent of Criteria<br>Met |
|-------------|----------------------------|---------------------------|----------------------------|
| А           | 21                         | 2                         | 91.30                      |
| Υ           | 8                          | 15                        | 34.78                      |
| G           | 7                          | 16                        | 30.43                      |
| AZ          | 17                         | 6                         | 73.91                      |
| ٧           | 3                          | 20                        | 13.04                      |
| С           | 6                          | 17                        | 26.09                      |
| 0           | 14                         | 9                         | 60.87                      |
| D           | 5                          | 18                        | 21.74                      |
|             |                            |                           |                            |

Criteria Met by Category I Institutions: 44.02%

TABLE II

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE SURVEY - PART I

CATEGORY II INSTITUTIONS

| Institution | Number of<br>Yes Responses | Number of<br>No Responses | Percent of Criteria<br>Met |
|-------------|----------------------------|---------------------------|----------------------------|
| F           | 10                         | 13                        | 43.48                      |
| AY          | 3                          | 20                        | 13.04                      |
| Z           | 16                         | 7                         | 69.57                      |
| U           | 17                         | 6                         | 73.91                      |
| N           | 10                         | 13                        | 43.48                      |
| AQ          | 11                         | 12                        | 47.83                      |
| В           | 3                          | 20                        | 13.04                      |
| Т           | 18                         | 5                         | 78.26                      |
| Р           | 0                          | 23                        | -0-                        |
| AT          | 2                          | 21                        | 8.70                       |
|             |                            |                           |                            |

Criteria Met by Category II Institutions: 39.13%

TABLE III

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE SURVEY - PART I

CATEGORY III INSTITUTIONS

| Institution | Number of<br>Yes Responses | Number of<br>No Responses | Percent of Criteria<br>Met |
|-------------|----------------------------|---------------------------|----------------------------|
| W           | 9                          | 14                        | 39.13                      |
| R           | 13                         | 10                        | 56.52                      |
| AX*         | 17                         | 5                         | 77.27                      |
| AW          | 19                         | 4                         | 82.61                      |
| Ε           | 16                         | 7                         | 69.57                      |
| AV          | 7                          | 16                        | 30.43                      |
| Н           | 10                         | 13                        | 43.48                      |
| АР          | 12                         | 11                        | 52.17                      |
| K           | 7                          | 16                        | 30.43                      |
| AO          | 13                         | 10                        | 56.52                      |
|             |                            |                           |                            |

Criteria Met by Category III Institutions: 53.71%

<sup>\*</sup>Twenty-two rather than twenty-three criteria were evaluated due to inconclusive evaluation by panel of experts on criteria #23; i.e., two panel members had affirmative responses, two had negative responses, and the fifth member abstained from rating the item.

Category I institutions ranged in percent of criteria met from a low of 13.04 by Institution V to a high of 91.30 percent by Institution A. Category II institutions ranged in percent of criteria met from a low of zero by Institution P to a high of 78.26 by Institution T. Category III institutions ranged in percent of criteria met from a low of 30.43 by Institutions AV and K to a high of 82.61 by Institution AW. A summary of the percent of the criteria met by each category with the composite percent for all institutions is shown in Table IV. Category III institutions fulfilled the greatest percent of the criteria with 53.71, followed by Category I institutions with a percent of 44.02 and Category II institutions with a percent of 39.13. These scores compare to a composite percent for all institutions of 45.72. Therefore, Category III was the only category of institutions that exceeded the composite percent for all institutions.

The institutional responses to each particular criterion are shown by category at Appendix I, along with the percent of all institution meeting that criterion. A summation of the percent of responses neach category is contained in Table V. By rank ordering the percent of criteria met by each category on each of the criteria, the relative overall standing was determined. Category I institutions ranked first on six, second on eleven, and third on six of the twenty-three criteria. Category II institutions ranked first on six, second on six, and third on eleven of the twenty-three criteria. Category III institutions ranked first on six, and third on four.

TABLE IV

SUMMATION OF INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE SURVEY - PART I

| Institutional<br>Category                | Percent of Criteria<br>Met |
|--|----------------------------|
| I  | 44.02                      |
| II                                       | 39.13                      |
| III                                      | 53.71                      |
| Criteria Met by all Institutions: 45.72% |                            |

TABLE V

PERCENT SUMMATION OF INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA - PART I

| Criteria |        | Category Perce |        | Overal1 |
|----------|--------|----------------|--------|---------|
| Number   | I      | 11             | III    | Percent |
| 1        | 75.00  | 60.00          | 90.00  | 75.00   |
| 2        | 37.50  | 30.00          | 30.00  | 32.14   |
| 3        | 25.00  | 40.00          | 90.00  | 53.57   |
| 4        | 62.50  | 50.00          | 70.00  | 60.71   |
| 5        | 37.50  | 30.00          | 60.00  | 42.86   |
| 6        | 100.00 | 90.00          | 100.00 | 96.43   |
| 7        | 62.50  | 40.00          | 70.00  | 57.14   |
| 8        | 37.50  | 20.00          | 20.00  | 25.00   |
| 9        | 50.00  | 30.00          | 60.00  | 46.43   |
| 10       | 12.50  | 40.00          | 90.00  | 50.00   |
| 11       | 37.50  | 60.00          | 70.00  | 57.14   |
| 12       | 75.00  | 60.00          | 80.00  | 71.43   |
| 13       | 62.50  | 40.00          | 60.00  | 53.57   |
| 14       | 62.50  | 40.00          | 60.00  | 53.57   |
| 15       | 25.00  | 30.00          | 20.00  | 25.00   |
| 16       | 25.00  | 20.00          | 10.00  | 17.86   |
| 17       | 37.50  | -0-            | 40.00  | 25.00   |
| 18       | -0-    | 20.00          | 10.00  | 10.71   |
| 19       | 25.00  | 30.00          | 30.00  | 25.00   |
| 20       | 37.50  | 40.00          | 40.00  | 39.29   |
| 21       | 75.00  | 50.00          | 80.00  | 67.86   |
| 22       | 12.50  | 40.00          | 30.00  | 28.57   |
| 23       | 37.50  | 40.00          | 33.33  | 37.04   |

An analysis of institutional responses to risk management and property insurance criteria reveals that there were problem areas that were common to all three institutional categories. Table VI shows there criteria which scored below 50 percent. The table reveals that all categories scored below 50 percent on the following criteria.

- 2. Has developed a statement of policy for the institution pertaining to insurance and risk management.
- 8. Has developed a formal program designed to identify, prevent, and/or reduce risks.
- 15. Has enforced rules and procedures and has monitored and measured the results of the risk management program.
- 16. Has prepared an annual report for the board of trustees, directors, and officers concerning risk management and property insurance cost-effectiveness.
- 17. Has consulted with similar institutions as to both common problems and common solutions thereto.
- 18. Has a staff education program designed to promote awareness of risk management policies and practices and risk reduction or elimination techniques.
- 19. Has developed a self-insurance "guideline" (on a per occurrence or annual aggregate basis) related to the institution's financial resources and spread-of-risk.
- 20. Has undertaken a formal risk control/property conservation program with annual physical inspections of major facilities.

TABLE VI

RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA SCORING BELOW 50 PERCENT BY INSTITUTIONAL CATEGORY

| Criteria | Ir | nstitutional Categ | ory |
|----------|----|--------------------|-----|
| Number   | Ī  | II                 | III |
| 1        |    |                    |     |
| 2        | X  | X                  | X   |
| 3        | X  | X                  |     |
| 4        |    |                    |     |
| 5        | X  | X                  |     |
| 6        |    |                    |     |
| 7        |    | X                  |     |
| 8        | X  | Χ                  | X   |
| 9        |    | X                  |     |
| 10       | X  | X                  |     |
| 11       | X  |                    |     |
| 12       |    |                    |     |
| 13       |    | X                  |     |
| 14       |    | X                  |     |
| 15       | X  | X                  | X   |
| 16       | X  | X                  | X   |
| 17       | X  | X                  | X   |
| 18       | X  | X                  | X   |
| 19       | Χ  | X                  | X   |
| 20       | X  | X                  | X   |
| 21       |    |                    |     |
| 22       | X  | X                  | X   |
| 23       | X  | X                  | X   |

- 22. Has a plan of evaluating expenditures to reduce risk including cost-effectiveness and the authority to authorize expenditures.
- 23. Has self-assumed risks in accordance with its financial capacity.

Additionally, the following criteria received a score below 50 percent by Category I and Category II institutions:

- 3. Has identified the probabilities of loss.
- 5. Has studied risk funding methods.
- 10. Has determined those risks which can be or should be transferred. The percent of institutions meeting each criterion by institutional category can be found at Appendix J.

In order to determine the adequacy of the risk management and property insurance programs of the private colleges and universities of Tennessee, as indicated by the criteria, the following levels of performance were established by the researcher: fulfilled 70 percent or more of the criteria - satisfactory; fulfilled 50 to 69.99 percent of the criteria - marginal; and those that fulfilled below 50 percent of the criteria - unsatisfactory. Each of the institutional categories had two institutions which were rated satisfactory. Category I had one institution rated marginal and five rated unsatisfactory. In addition to the two satisfactory institutions, Category II had one marginal institution and seven which were rated unsatisfactory.

Category III, in addition to the two satisfactory ratings, had four institutions rated marginal and four rated unsatisfactory. A further analysis of the three categories of institutions showed that 37.5

percent of the Category I institutions, 30 percent of the Category II institutions, and 60 percent of the Category III institutions are rated either satisfactory or marginal. Table VII shows the rating of each institution.

There are various forms of property insurance that an institution of higher education can carry on its facilities and contents. These various forms have been described in detail in Chapter II of the study. The most common type of insurance coverage carried by the private colleges and universities of Tennessee was fire and extended coverage. All twenty-six institutions answering Part II of the questionnaire maintained this coverage. The second most popular type of coverage was protection against vandalism and malicious mischief carried by 73.1 percent of the institutions. Other types of coverage carried by the institutions were builders' risk by 57.7 percent, glass breakage coverage by 26.9 percent, inland marine by 23.1 percent, and two institutions or 7.7 percent had boiler and machinery coverage. Types of property insurance coverage carried by each institution is shown in Table VIII.

The amount an institution must pay for insurance coverage is dependent upon such factors as rates and property values. The rates charged for coverage are in turn dependent to a considerable degree upon the amount of risk the institution self-assumes through policy deductibles. To maintain rates at an optimum level each institution should accept risk commensurate with their overall financial capacity.

TABLE VII

ADJECTIVAL RATING OF INSTITUTIONAL RISK MANAGEMENT AND PROPERTY INSURANCE PRACTICES BASED UPON PERCENT OF CRITERIA MET

| Institution | Percent of<br>Criteria Met | Adjectival<br>Rating |
|-------------|----------------------------|----------------------|
| А           | 91.30                      | Satisfactory         |
| Υ           | 34.78                      | Unsatisfactor        |
| G           | 30.43                      | Unsatisfactor        |
| AZ          | 73.91                      | Satisfactory         |
| ٧           | 13.04                      | Unsatisfactor        |
| C           | 26.09                      | Unsatisfactor        |
| 0           | 60.87                      | Marginal             |
| D           | 21.74                      | Unsatisfactor        |
| F           | 43.48                      | Unsatisfactor        |
| AY          | 13.04                      | Unsatisfactor        |
| Z           | 69.57                      | Marginal             |
| U           | 73.91                      | Satisfactory         |
| N           | 43.48                      | Unsatisfactor        |
| AQ          | 47.83                      | Unsatisfactor        |
| В           | 13.04                      | Unsatisfactor        |
| T           | 78.26                      | Satisfactory         |
| Р           | -0-                        | Unsatisfactor        |
| AT          | 8.70                       | Unsatisfactor        |
| W           | 39.13                      | Unsatisfactor        |
| R           | 56.52                      | Marginal             |
| AX          | 77.27                      | Satisfactory         |
| AW          | 82.61                      | Satisfactory         |
| Ε           | 69.57                      | Marginal             |
| AV          | 30.43                      | Unsatisfactor        |

TABLE VII (Continued)

| Institution | Percent of<br>Criteria Met | Adjectival<br>Rating |
|-------------|----------------------------|----------------------|
| Н           | 43.48                      | Unsatisfactory       |
| AP          | 52.17                      | Marginal             |
| K           | 30.43                      | Unsatisfactory       |
| AO          | 56.52                      | Marginal             |

TABLE VIII

FORMS OF PROPERTY INSURANCE CARRIED BY PRIVATE COLLEGES AND UNIVERSITIES IN TENNESSEE

| Institution | Fire &<br>Extended<br>Coverage | Builders'<br>Risk | Glass | Vandalism &<br>Malicious<br>Mischief | Inland<br>Marine | Other  |
|-------------|--------------------------------|-------------------|-------|--------------------------------------|------------------|--------|
| А           | X                              | Х                 |       | Х                                    |                  | boiler |
| Υ           | Χ                              | Χ                 |       |                                      | X                |        |
| G           | X                              |                   | Χ     | X                                    |                  |        |
| AZ          | Χ                              | Χ                 |       |                                      |                  |        |
| ٧           | X                              |                   |       | X                                    |                  |        |
| С           | Χ                              |                   |       | Χ                                    |                  |        |
| D           | Χ                              | Χ                 |       | Χ                                    |                  |        |
| AY          | Χ                              |                   |       | Χ                                    |                  |        |
| Z           | X                              | X                 |       | X                                    |                  |        |
| U           | Χ                              | Χ                 | Χ     |                                      |                  |        |
| N           | χ                              | Χ                 |       |                                      |                  |        |
| AQ          | Χ                              | X                 |       |                                      |                  |        |
| В           | Χ                              |                   |       |                                      |                  |        |
| T           | Χ                              | Χ                 |       | X                                    |                  |        |
| Р           | Χ                              |                   |       | X                                    |                  |        |
| AT          | Χ                              |                   |       | X                                    |                  |        |
| W           | Χ                              |                   |       | X                                    |                  |        |
| R           | Χ                              |                   |       |                                      |                  | boiler |
| AX          | Χ                              | Χ                 | X     | X                                    | X                |        |
| AW          | χ                              |                   | X     | X                                    |                  |        |
| Ε           | X                              | Χ                 |       | X                                    |                  |        |
| AV          | Χ                              | X                 | Χ     | X                                    |                  |        |
| Н           | X                              |                   | Χ     | X                                    | Χ                |        |
| AP          | X                              | Χ                 | X     | X                                    | Χ                |        |
| K           | Χ                              | X                 |       | X                                    | Χ                |        |
| AO          | X                              | Χ                 |       | X                                    | X                |        |

The twenty-eight colleges and universities in Tennessee, participating in the study, utilized deductibles that ranged from zero, or first dollar coverage, to \$50,000. Additionally, one institution did not assume a fixed dollar amount but had a deductible which was 10 percent of loss. The most common deductible assumed by the institutions was \$100 which was used by nine or 32.1 percent. The second most popular range of deductibles was in the \$1,001 to \$5,000 group which included six or 21.4 percent of the institutions. Only four institutions had deductibles of \$25,000 or more, with one using a \$50,000 deductible. A summary of the range of deductibles assumed by the institutions is shown in Table IX.

A comparison of the annual institutional operating budget and the deductible amount provided a measurement of the institution's "self-assumption" of risk in relationship to its financial capacity. The deductible, when expressed as a percentage of the annual operating budget, reflects a distribution which ranged from a low of zero for Institution A to a high of 4.22 percent for Institution Y. Table X shows a percentage comparision of the property insurance deductible to the annual operating budget fro each institution.

In order to evaluate the adequacy of each institution's "self-assumption" of risk effort, guidelines furnished by two members of the panel were applied. Stanley R. Tarr reported that "Felix Kloman maintains that .1 percent per loss and 1 percent annually of operating

TABLE IX

SUMMARY OF PROPERTY INSURANCE DEDUCTIBLES UTILIZED BY INSTITUTIONS FOR FISCAL YEAR 1975

| Deductible Level     | Number of Institutions |
|----------------------|------------------------|
| None                 | 1                      |
| \$100                | 9                      |
| \$101 to \$500       | 3                      |
| \$501 to \$1,000     | 4                      |
| \$1,001 to \$5,000   | 6                      |
| \$5,001 to \$10,000  | 0                      |
| \$10,001 to \$25,000 | 3                      |
| Over \$25,000        | 1                      |

Note: One additional institution, not included above, assumed a deductible of 10 percent of loss.

TABLE X

PERCENTAGE COMPARISON OF PROPERTY INSURANCE DEDUCTIBLE AMOUNT TO ANNUAL OPERATING BUDGET

| Institution | Property Insurance<br>Deductible Amount | Annual Operating<br>Budget | Percentage<br>Comparison |
|-------------|---|----------------------------|--------------------------|
| mscreación  | beddeerbre /imodife                     | budget                     | Comparison               |
| A           | None                                    | \$480,582                  | -0-                      |
| Y           | \$25,000                                | 593,000                    | 4.216                    |
| G           | 100                                     | 752,181                    | .013                     |
| AZ          | 1,000                                   | 772,194                    | .130                     |
| ٧           | 100                                     | 973,952                    | .010                     |
| C<br>0      | 100                                     | 1,246,413                  | .008                     |
| 0           | 1,000                                   | 1,285,689                  | .078                     |
| D           | 100                                     | 1,672,442                  | .006                     |
| F           | 100                                     | 2,002,533                  | .005                     |
| AY          | 1,000 fire/                             | 2,073,259                  | .048                     |
| 7           | 100 theft                               | 2 241 000                  | .005                     |
| Z<br>U      | 5,000<br>25,000                         | 2,241,000                  | .223                     |
| N           | 100                                     | 2,298,134<br>2,600,000     | 1.088                    |
| AQ          | 100                                     | 2,690,856                  | .004                     |
| R           | 5,000                                   | 2,717,383                  | .184                     |
| B<br>T      | 50,000                                  | 2,742,000                  | 1.823                    |
| P           | 1,000                                   | 2,921,850                  | .034                     |
| AT          | 100                                     | 2,970,000                  | .003                     |
| W           | 25,000                                  | 3,055,000                  | .818                     |
| R           | 2,500                                   | 3,188,752                  | .078                     |
| AX          | 10% of loss                             | 3,938,092                  | *                        |
| AW          | 5,000                                   | 4,100,000                  | .122                     |
| Ε           | 500                                     | 4,904,528                  | .010                     |
| AV          | 100                                     | 4,971,336                  | .002                     |
| Н           | 500                                     | 6,956,531                  | .007                     |
| AP          | 3,000                                   | 7,851,000                  | .038                     |
| K           | 500                                     | 12,000,000                 | .004                     |
| AO          | 5,000**                                 | 110,530,000                | .005                     |
|             |   |                            |                          |

<sup>\*</sup>Unable to compute because of uncertainty of loss.

<sup>\*\*</sup>Which disappears at the \$25,000 level.

budget is optimum." Additionally, Robert M. Beth states, "In my opinion, universities should be assuming somewhere from 1/10 of 1 percent to 1 percent of their operating budget as a self insured retention."<sup>2</sup> Thus, by applying the .1 percent per loss and 1 percent aggregate of annual operating budget quideline current levels of self retention of risk can be compared to the recommended retention levels. Assuming that the deductible amount retained by the institutions is on a per loss basis, only eight of twenty-seven institutions (institution AX's specific assumption is uncertain) met or exceeded the recommended retention level. The comparison readily showed the lack of risk assumption on the part of private colleges and universities of Tennessee. Table XI gives a comparison of actual and recommended property insurance deductible levels for each institution. Adoption of the recommended levels of self-risk assumption by individual institutions can result in a significant savings in premium cost. Guidelines furnished by the Tennessee Rule Book, page 41 of the study, indicates the percentages of savings that can be realized.

Historical data pertaining to the property insurance experiences of Tennessee's private colleges and universities were found to be quite sparse. Only two institutions, H and AX, could provide data for the ten-year period 1966 through 1975. Other institutions providing

Note from Stanley R. Tarr, Director of Risk Management, Rutgers University, December 16, 1976.

<sup>&</sup>lt;sup>2</sup>Letter from Robert M. Beth, Director, Risk Management, Stanford University, December 15, 1976.

TABLE XI

COMPARISON OF ACTUAL AND RECOMMENDED PROPERTY INSURANCE DEDUCTIBLE AMOUNTS

|             | Annual Operatin        |                      |                      | ecommended             |
|-------------|------------------------|----------------------|----------------------|------------------------|
| Institution | Budget                 | Actual               | Per Loss             | Annual Aggregate       |
| А           | \$480,582              | None                 | \$480.58             | \$4,805.82             |
| Y           | 593,000                | 25,000               | 593.00               | 5,930.00               |
| G           | 752,181                | 100                  | 752.18               | 7,521.81               |
| AZ          | 772,194                | 1,000                | 772.19               | 7,721.94               |
| ٧           | 973,952                | 100                  | 973.95               | 9,739.52               |
| C           | 1,246,413              | 100                  | 1,246.41             | 12,464.13              |
| 0           | 1,285,689              | 1,000                | 1,285.69             | 12,856.89              |
| D           | 1,672,442              | 100                  | 1,672.44             | 16,724.42              |
| F           | 2,002,533              | 100                  | 2,002.53             | 20,025.33              |
| AY          | 2,073,259              | 1,000 fire/          | 2,073.26             | 20,732.59              |
|             |                        | 100 theft            |                      |                        |
| Z           | 2,241,000              | 5,000                | 2,241.00             | 22,410.00              |
| IJ          | 2,298,134              | 25,000               | 2,298.13             | 22,981.34              |
| N           | 2,600,000              | 100                  | 2,600.00             | 26,000.00              |
| AQ          | 2,690,856              | 100                  | 2,690.86             | 26,908.56              |
| B<br>T      | 2,717,383              | 5,000                | 2,717.38             | 27,173.83              |
| P           | 2,742,000              | 50,000               | 2,742.00             | 27,420.00              |
|             | 2,921,850              | 1,000                | 2,921.85             | 29,218.50              |
| AT          | 2,970,000              | 100                  | 2,970.00             | 29,700.00              |
| W<br>R      | 3,055,000              | 25,000               | 3,055.00             | 30,550.00              |
| AX          | 3,188,752<br>3,938,092 | 2,500                | 3,188.75             | 31,887.52              |
| AW          | 4,100,000              | 10% of loss<br>5,000 | 3,939.09<br>4,100.00 | 39,380.92<br>41,000.00 |
| E"          | 4,904,528              | 500                  | 4,904.53             | 49,045.28              |
| ĀV          | 4,971,336              | 100                  | 4,971.34             | 49,713.36              |
| Ĥ           | 6,956,531              | 500                  | 6,956.53             | 69,565.31              |
| AP          | 7,851,000              | 3,000                | 7,851.00             | 78,510.00              |
| K           | 12,000,000             | 500                  | 12,000.00            | 120,000.00             |
| ÃO          | 110,530,000            | 5,000*               | 110,530.00           | 1,105,300.00           |

<sup>\*</sup>Which disappears at the \$25,000 Tevel.

data covering a period of two or more years were: Z - six years; AP and AQ - five years; T, D, B, and AZ - four years; E and AO - three years; R, Y, and V - two years. Thus, only fourteen of the twentyeight or 50 percent of the institutions, that participated in the study, could provide data pertaining to their property insurance experience for two or more years. Tables XII, XIII, XIV, and XV give the property insurance premiums paid for property coverage along with the insured losses sustained by all institutions for fiscal years 1972 through 1975. Two of the four years experienced an insured loss/ premium ratio which was below the 50 percent level (1974 - 5.66 percent, 1975 - .93 percent) a level considered acceptable by commercial insurance companies. However, during fiscal years 1972 and 1973, two major facilities were destroyed by fire. Institution B lost a building insured loss for \$1,000,000 in FY 1972, and Institution E suffered an insured loss of \$2,107,438 in FY 1973. Thus, the insured loss/premium ratio for Tennessee's private colleges and universities for the fouryear period 1972-1975 was 329.32 percent, Table XVI. A comparison of property insurance premiums and loss experience for each institution, that provided data covering two or more years can be found at Appendix Κ.

## III. INTERPRETATION OF DATA

## Risk Management and Property Insurance Data

The private colleges and universities of Tennessee reflected poor risk management and property insurance practices when evaluated

TABLE XII

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES
OF PRIVATE COLLEGES AND UNIVERSITIES IN TENNESSEE
FOR FISCAL YEAR 1975

| Institution | Property Insurance<br>Premium | Insured<br>Losses | Uninsured |
|-------------|-------------------------------|-------------------|-----------|
| Institution | Fremrum                       | LUSSES            | Losses    |
| А           | \$2,050.                      | 0                 | 0         |
| Y           | 1,500.                        | 0                 | \$300.    |
| AZ          | 16,924.                       | 0                 | 0         |
| ٧           | 3,509.                        | 150.              | 100.      |
| D           | 5,756.                        | 0                 | 0         |
| F           | 16,214.                       | 0                 | 0         |
| Z           | 16,000.                       | 0                 | 0         |
| U           | 17,690.                       | 1,500.            | 25,000.   |
| N           | 8,500.                        | 0                 | 0         |
| AQ          | 9,000.                        | 0                 | 0         |
| В           | 19,445.                       | 0                 | 0         |
| T           | 5,268.                        | 0                 | 0         |
| Р           | 28,727.                       | 0                 | 0         |
| AT          | 11,737.                       | 800.              | 100.      |
| R           | 27,626.                       | 0                 | 0         |
| AX          | 18,032.                       | 1,146.            | 128.      |
| E           | 48,753.                       | 0                 | 0         |
| AV          | 22,652.                       | 0                 | 0         |
| Н           | 17,087.                       | 0                 | 0         |
| AP          | 35,183.                       | 308.              | *         |
| AO          | 87,628.                       | 0                 | 0         |
| Totals      | \$419,281.                    | \$3,904.          | \$25,628. |

Insured loss/premium ratio: 0.93%

<sup>\*</sup>Data not available.

TABLE XIII

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES
OF PRIVATE COLLEGES AND UNIVERSITIES IN TENNESSEE
FOR FISCAL YEAR 1974

| \$1,500.<br>17,585.<br>2,051.<br>4,445.<br>15,000. | 0<br>0<br>\$500.<br>0 | \$200.<br>0<br>100. |
|--|-----------------------|---------------------|
| 2,051.<br>4,445.                                   | \$500.                | 100.                |
| 4,445.   |                       |                     |
|  | 0                     | 0                   |
| 15,000.  |                       | 0                   |
|  | 0                     | 0                   |
| 8,582.   | 0                     | 0                   |
| 20,394.  | 0                     | 0                   |
| 3,803.   | 0                     | 0                   |
| 35,832.  | 14,560.               | 26,760.             |
| 3,893.   | 0                     | 0                   |
| 39,444.  | 0                     | 0                   |
| 17,000.  | 0                     | 0                   |
| 28,611.  | 99.                   | *                   |
| 69,728.  | 0                     | 0                   |
|  | \$15,159.             | \$25,060.           |
|  | 69,728.<br>67,868.    | 69,728.             |

\*Data not available.

TABLE XIV

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES
OF PRIVATE COLLEGES AND UNIVERSITIES IN TENNESSEE
FOR FISCAL YEAR 1973

| Institution | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|-------------|-------------------------------|-------------------|---------------------|
| AZ          | \$15,316.                     | 0                 | 0                   |
| D           | 4,445.                        | 0                 | 0                   |
| Z           | 13,890.                       | 0                 | 0                   |
| AQ          | 8,086.                        | \$4,121.          | 0                   |
| В           | 22,244.                       | 0                 | 0                   |
| T           | 3,115.                        | 0                 | 0                   |
| АХ          | 5,907.                        | 0                 | 0                   |
| Ε           | 45,230.                       | 2,107,438.        | 0                   |
| Н           | 19,000.                       | 0                 | 0                   |
| AP          | 26,362.                       | 4,785.            | *                   |
| Totals      | \$163,595.                    | \$2,116,344.      | 0                   |

Inusured loss/premium ratio: 1,293.65%

<sup>\*</sup>Data not available.

TABLE XV

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES
OF PRIVATE COLLEGES AND UNIVERSITIES IN TENNESSEE
FOR FISCAL YEAR 1972

| Institution | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|-------------|-------------------------------|-------------------|---------------------|
| AZ          | \$13,094.                     | 0                 | 0                   |
| D           | 4,445.                        | 0                 | 0                   |
| Z           | 13,086.                       | 0                 | 0                   |
| AQ          | 8,272.                        | \$5,127.          | 0                   |
| Ţ           | 2,803.                        | 0                 | 0                   |
| AX          | 5,872.                        | 8,097.            | \$900.              |
| Н           | 18,875.                       | 0                 | 0                   |
| AP          | 26,098.                       | 31,445.           | *                   |
| В           | 22,360.                       | 1,000,000.        | 0                   |
| Totals      | \$114,905.                    | \$1,044,669.      | \$900.              |

Insured loss/premium ratio: 909.16%

<sup>\*</sup>Data not available.

TABLE XVI

SUMMATION OF INSURED LOSS/PREMIUM RATIOS FOR THE PRIVATE COLLEGES AND UNIVERSITIES IN TENNESSEE FOR FISCAL YEARS 1972 THROUGH 1975

| Year  | Number of<br>Institutions<br>Included | Premiums   | Insured<br>Losses | Loss/<br>Premium<br>Ratio |
|-------|---------------------------------------|------------|-------------------|---------------------------|
| 1975  | 21                                    | \$419,281. | \$3,904.          | .93                       |
| 1974  | 14                                    | 267,868.   | 15,159.           | 5.66                      |
| 1973  | 10                                    | 163,595.   | 2,116,344.        | 1,293.64                  |
| 1972  | 9                                     | 114,905.   | 1,044,669.        | 909.16                    |
| otals |                                       | \$965,649. | \$3,180,076.      | 329.32                    |

against the twenty-three criteria developed by a panel of nationally recognized experts. The percent of criteria met by each institutional category (44.02 - Category I, 39.13 - Category II, and 53.71 - Category III) was extremely low and tended to indicate that very little attention has been given to this area even by Category III institutions, which traditionally have a large and specialized staff. Additionally, many of the institutional representatives, during telephone conversation with the researcher, indicated that they considered the tasks involved with risk management and property insurance a responsibility of the company with which the property insurance was placed.

Institutional responses to the risk management and property insurance criteria indicated that there are problem areas common to all institutional categories. The following criteria were met by less than 50 percent of the schools in each institutional category:

- 2. Has developed a statement of policy for the institution pertaining to insurance and risk management.
- 8. Has developed a formal program designed to identify, prevent, and/or reduce risks.
- 15. Has enforced rules and procedures and has monitored and measured the results of the risk management program.
- 16. Has prepared an annual report for the board of trustees, directors, and officers concerning risk management and property insurance cost-effectiveness.
- 17. Has consulted with similar institutions as to both common problems and common solutions thereto.

- 18. Has a staff education program designed to promote awareness of risk management policies and practices and risk reduction or elimination techniques.
- 19. Has developed a self-insurance "guideline" (on a per occurrence or annual aggregate basis) related to the institution's financial resources and spread-of-risk.
- 20. Has undertaken a formal risk control/property conservation program with annual physical inspections of major facilities.
- 22. Has a plan of evaluating expenditures to reduce risk including the cost-effectiveness and the authority to authorize expenditure.
- 23. Has self-assumed risks in accordance with its financial capacity.

These areas of common weakness indicated an absence of a formal indepth program of risk management. The majority of the risk management programs that existed at Tennessee's private colleges and universities tended to be somewhat superficial in scope and depth of coverage. A rating system devised by the researcher further indicated the inadequacy of the risk management programs carried out by Tennessee's private colleges and universities in that only six of twenty-eight received a satisfactory rating. Additionally, only six institutions received a marginal rating.

The forms of property insurance carried by Tennessee's private colleges and universities reflected emphasis on fire and extended coverage (100 percent) and coverage against vandalism and malicious mischief

(73.1 percent). However, those institutions failing to carry the latter coverage were deficient in an area in which institutions of higher education can be so vulnerable, especially during periods of student unrest. Glass breakage, builders' risk, and inland marine coverage were carried to a lesser degree; however, a determination of need for these types of coverage could not be made without knowing additional details peculiar to each institution which was beyond the scope of this study. Another form of property coverage, boiler and machinery, was carried by only two or 7.7 percent of the institutions. It appeared that practically all of the institutions would need this form of protection and that a deficiency existed in the property insurance coverage of those institutions that failed to include boiler and machinery coverage.

The assumption of risk by an institution of higher education, in relation to its financial capacity, can be evaluated by examining the deductible clause of the property insurance. The trend among Tennessee's private colleges and universities was to assume a deductible amount which was woefully inadequate. This fact can be illustrated in that the most common deductible use by the twenty-eight institutions was \$100 (by nine or 32.14 percent). This is an amount commonly assumed by an individual on his homeowner or automobile insurance policy. The nine institutions described above are in addition to Institution A, which does not use a deductible. The deductible utilized by Institution AX, 10 percent of loss, was a risky practice because of the possibility

of a catastrophic loss. A fixed dollar amount as the deductible appears to be a sounder practice.

The lack of risk assumption on the part of Tennessee's private institutions, through deductibles, was a weakness common to the majority of the schools. Table XI, page 106 shows that only eight of the institutions assumed a deductible equal to or greater than recommended levels. This is an area where Tennessee's private institutions can possibly realize the greatest potential savings on their property insurance coverage. The potential savings, using increased deductibles, are considerable and can reduce the cost of property insurance substantially (see Tennessee Rule Book suggested savings, page 41).

Data provided by the private colleges and universities of
Tennessee pertaining to property insurance premium and loss experience,
during the ten-year period 1966-1975, were quite incomplete. Only 50
percent of the institutions provided data covering two or more years,
indicating the incompleteness of institutional records in this area.

Additionally, some of the institutional representatives told the
researcher, during telephone conversations, that the data provided
came from their insurance agent's files because the college or university
did not maintain historical records on this subject. One institution,
that did not respond to the questionnaire, told the researcher that
the information was requested from their insurance agent, but that the
agent did not maintain data on premiums, losses and property values;
an answer that appeared to be fully accepted by the institutional
manager of insurance programs. The lack of data readily retrievable at

each institution tends to cause one to surmise that institutional property insurance managers view insurance premiums as a fixed cost which must be accommodated each year in the budget and as an expense which is beyond the institutions' capability to control. Additionally, several institutional insurance managers indicated that they neither had formal training nor professional experience in the area and that the pressures of routine matters (food service, housing, etc.) precluded their giving more time to insurance management.

The insured loss/premium ratio experienced, during the 1972-1975 period, by Tennessee's private colleges and universities as a consolidated group was very high, 329.32 percent. This means that for every dollar the institutions paid for commercial insurance coverage, the companies returned \$3.29 for insured losses. This high ratio was caused primarily by two large fire losses, a \$1,000,000 loss by Institution B in 1972 and a \$2,107,438 loss by Institution E in 1973. The vast majority of Tennessee's private colleges and universities individually have good insured loss/premium ratios, but only the two institutions mentioned above have an insured loss/premium ratio above 50 percent. The overall ratio clearly illustrates the necessity for excessive loss coverage against catastrophic losses. However, those institutions with sustained records of loss prevention should logically use those records to obtain more favorable insurance rates.

## Suitability of Tennessee's Private Colleges and Universities for a Self-Insurance Association

In order to determine whether or not the private colleges and universities of Tennessee would be a suitable association for a self-insurance fund, certain criteria must be applied. Authorities on the subject are in basic agreement on the criteria necessary for the establishment and successful operation of a self-insurance fund. One of the most comprehensive lists of self-insurance criteria was developed by the Florida Public Schools Self-Insurance Study Committee. Each of the Florida criteria will be quoted and then followed by a discussion of how it would apply to an association of private colleges and universities of Tennessee.

1. The law of large numbers, a basic principle of insurance, must be complied with. This means that the units of property must be numerous enough to permit both prediction with reasonable accuracy of probable future losses and the collection of large premium reserves related to individual risks.

The term "numerous enough" is not further clarified to designate a minimum number of facilities that are essential for a successful self-insurance program. However, Dutton reports that the highly successful self-insurance program of Montgomery County, Maryland, incoporates only

<sup>&</sup>lt;sup>3</sup>Report of the Florida Public Self-Insurance Study Committee (Tallahassee: State Department of Education, 1969), pp. 15-19; cited by Jack G. Nichols, "Self Insurance for the Public Schools of Tennessee: A Feasibility Study" (unpublished doctoral dissertation, University of Tennessee, 1971), pp. 62-65.

151 buildings, indicating that the minimum acceptable number of facilities is at least that small.<sup>4</sup> The thirty-seven private colleges and universities of Tennessee own facilities that exceed this number many times over.

2. The values in each separate property should be uniform and not excessively large. Assumption of the entire risk on one or several comparatively large units prevents the orderly working of the law of averages. A total loss involving a large unit could destroy the program.

The value of the buildings owned by Tennessee's private colleges and universities was reported to be \$263,236,640 in 1970. Data collected by the researcher from twenty-one institutions, responding to that part of the questionnaire, showed that the value of buildings and contents was \$366,992,355 in 1975. Although the majority of the institutions were liberal arts institutions with facilities of relatively uniform value and function, there are high value buildings and equipment which support various medical, engineering and scientific education programs. Additionally, some of the large institutions have computers which are normally housed in one central location.

<sup>&</sup>lt;sup>4</sup>Gary Dutton, "Alternative Plans for Providing Insurance Protection for the Physical Property of the School Systems of the Upper East Tennessee Educational Cooperative," (unpublished doctoral dissertation, University of Tennessee, 1975), p. 96.

John S. Diekhoff, Ida L. Rogers, and Monnie S. Hatcher. A Study of Private Higher Education in Tennessee (Nashville: Tennessee Council of Private Colleges, 1970), p. 60.

3. A self-insurance fund should assume only those risks of approximately the same degree of hazard. Assumption of relatively hazardous along with less hazardous risks, in the absence of a sophisticated mechanism for adjusting premium rates, is unsound insurance practice which results in unfair distribution of risk and could lead to early exhaustion of the fund.

The facilities owned by Tennessee's private colleges and universities represent a broad spectrum of facility construction. Modern fire-resistive brick construction with sprinkler and fire alarm systems compose the vast majority of facilities; however, many older high risk buildings are still in use. Although many of the institutions using older buildings have attempted to enhance the fire-resistiveness of these facilities through the installation of sprinkler systems, fire-resistant floor coverings and ceilings, etc., several distinct categories of risk exist.

4. The units covered must be sufficiently separated geographically so that conflagration or catastrophe possibilities will be minimized.

The campuses of the private colleges and universities of Tennessee are located throughout the state, from Bristol in the east to Memphis in the west, a distance of approximately 500 miles. However, almost one-half (48.65 percent) of the institutions are concentrated in the metropolitan areas of three cities (Nashville - 10 institutions, Memphis - 5 institutions, Jackson - 3 institutions). Additionally, three institutions, of which the combined facilities value would

approximate one-quarter of the total value of all institutions, are located on adjoining campuses. Thus, the high concentration of institutions in certain geographic areas could make a self-insurance fund highly vulnerable to catastrophic losses.

5. Complete transfer from outside insurance should be avoided unless a sufficient fund has been accumulated to withstand large losses. A complete assumption of risk at the beginning of a self-insurance program is unscientific in that a substantial loss in the early stages will cripple the fund.

A self-insurance association composed of the private colleges and universities of Tennessee would need to be a "partial" self-insurance fund which utilized commercial coverage for all risks over a limited amount. Initial capitalization of the fund would have to be accomplished through an assessment of member institutions along with annual contributions. The vast financial resources required to establish a "full" self-insurance fund appears beyond the financial capabilities of an association of these institutions. However, the aggregate assumption of a partial self-insurance fund would increase as the fund's reserve increased.

6. Very little dependence should be placed on the previous ten- or twenty-year loss record, since a much longer period is required to establish a statistically valid base for prediction. Many cases are on record where losses within a single year have more than exhausted a self-insurance fund accumulated over a considerable number of years.

The private colleges and universities of Tennessee indicated, in response to the researcher's questionnaire, that historical records pertaining to loss experiences for an extended period are not readily available. Data collected for the period 1972 through 1975 reflects an insured loss/premium ratio of 329.32 percent for the institutions as a consolidated group. Thus, the insured loss/premium ratio experienced during the past four-year period would have seriously impaired a self-insurance fund.

7. Funds must be sufficiently large to provide not only for normal loss expectation but also for the unexpected abnormal loss. Frequently proposals for self-insurance advice accumulation of funds sufficient to cover only the small losses indicated by the loss of previous few years. In such cases the occurrence of a substantial loss almost inevitably will wreck the program.

Self-insurance funds are usually established by a governmental appropriation sufficient to sustain the fund during its early years; however, private institutions do not have such a source of funds. The private colleges and universities of Tennessee would have to establish the initial reserve by assessing each institution an entry fee or by borrowing the money from a commercial source. Either of the above options would probably prove most difficult. The already-taxed financial resources of many of Tennessee's private institutions could not be made available for this use and the cost of commercial loans, if obtainable, would reduce any savings realized by the fund.

8. A self-insurance plan should never be undertaken if the finances of the governmental unit are not in a strong condition.

Premium payments to an insurance company furnish a definite guarantee for a precisely known outlay. Under a self-insurance plan, a substantial variation in the expected loss experience may result in serious financial difficulties. If losses should necessitate bond issue exceeding debt limitations, legal and political difficulties could postpone indefinitely the replacement of destroyed property.

Since the private colleges and universities of Tennessee are not institutions of a governmental unit, the soundness of a self-insurance fund would depend upon the financial resources committed to its support by member institutions. Because of limited financial resources and the inability to readily assume bonded indebtness, a form of partial self-insurance would be more suitable than full self-insurance.

9. The self-insurance fund should be kept inviolate except for payments of losses and expenses of administering the fund. Sufficient guarantees should be present to make it impossible to tamper with accumulated insurance funds for other purposes. Costs of administrative and technical services should be calculated as part of the cost of the self-insurance program and not concealed in the general budget.

Self-insurance funds of the private colleges and universities of Tennessee could easily be kept inviolate by contractual agreement of member institutions. Upon establishment of such a fund each member institution would agree that funds could not be used for any purpose

other than payments of loss and administrative expenses. The governors of the fund as well as member institutions would be bound by contract and/or policy.

10. Provisions must be made to supply the specialized inspection, engineering, and fire protection activities necessary to minimize losses.

Inspection, engineering and fire prevention for a self-insurance fund could easily be provided as part of the administrative cost of the fund. This is a practice common to self-insurance funds and one which is accommodated in the administrative costs (usually 3 to 6 percent of earned premiums).

An assessment of criteria developed by the Florida Public School Self-Insurance Study Committee indicated that Tennessee's private colleges and universities did not appear to be a suitable association for a self-insurance fund. The assessment of the criteria indicated that the primary problem areas confronting the establishment and operation of a self-insurance fund were: (1) the lack of uniformity in facility values; (2) a wide degree of hazard represented by facilities; (3) vulnerability to catastrophic loss due to geographic concentration; (4) a history of high insured loss/premium ratios; and (5) the inability to furnish initial capitalization and financial support to sustain the fund during its early years.

## CHAPTER V

SUMMARY, FINDINGS, RECOMMENDATIONS AND CONCLUDING STATEMENT

### I. SUMMARY

The problem which this study has addressed is one that has become increasingly acute to Tennessee's private colleges and universities in recent years; that of providing insurance coverage for their facilities and contents at a reasonable cost. This coverage has been provided by commercial insurance companies at a cost which many of the institutions considered excessive. The purpose of the study was to evaluate the risk management and property insurance practices of those institutions and to recommend improved practices that might significantly reduce the cost of coverage.

Specifically, the study was designed to examine the following questions:

- 1. What were the characteristics and experiences of self-insurance plans in operation that included protection for educational properties?
- 2. What were the risk management and property insurance practices of selected private colleges and universities in Tennessee?
- 3. Were the risk management and property insurance practices adequate, when evaluated against the criteria established by a panel of nationally recognized experts?

- 4. What were the insured loss versus premium experiences of selected private colleges and universities in Tennessee during the tenyear period 1966-1975?
- 5. What alternative practices appeared appropriate for improving the risk management and property insurance programs of selected private colleges and universities in Tennessee?

The scope of the study was delimited to those thirty-seven private colleges and universities in Tennessee which were members of the Tennessee Council of Private Colleges and were accredited by the Southern Association of Colleges and Schools. Included in the study was a review of related literature to include state laws pertaining to insurance, a review and summary of selected self-insurance programs, the development of risk management and property insurance criteria, an examination and evaluation of institutional risk management and property insurance practices, an examination of the insured loss versus premiums paid ratios, and an evaluation to determine the suitability of the institutions for a self-insurance association.

A review of the literature revealed that risks confront all educational institutions and that there are various methods by which these risks can be treated, i.e., programs designed to reduce and/or eliminate risks, self-insurance programs, commercial insurance coverage, etc. Studies conducted at both the state and national levels indicate that educational institutions and systems have received satisfactory protection and service from commercial insurance companies; however, the cost of commercial coverage has been excessive. Numerous

feasibility studies indicated that state or system-wide self-insurance programs could be a suitable alternative to commercial coverage. Additionally, improved risk management and property insurance practices, such as increasing deductible amounts, could significantly reduce the cost of commercial insurance.

Tennessee laws governing insurance are general in scope and authorize the Commissioner of Insurance and Banking to promulgate rules and regulations to govern the writing of insurance within the state.

State laws neither prohibit nor provide for the formation of self-insurance associations.

Several states in the Southeastern United States have established and successfully operated self-insurance programs to cover state property, including educational facilities. Many of these funds were established in response to the high cost of commercial insurance coverage and/or difficulty experienced in obtaining commercial coverage.

An analysis of data collected by questionnaire from Tennessee's private colleges and universities indicated that the vast majority of the institution's risk management and property insurance practices were either marginal or unsatisfactory. Several problem areas, common to all institutional categories, were identified. Additionally, the risk assumed by individual institutions through deductible amounts was woefully inadequate. Although data pertaining to insured losses and premiums were sparse, the insured loss versus premiums ratios that could be computed were very high. An association of private colleges and universities in Tennessee for self-insurance purposes did not

appear feasible when the criteria taken from the <u>Report of the Florida</u>

<u>Public School Self-Insurance Study Committee</u> were applied.

## II. FINDINGS

The data collected and analyzed in the process of this research support the following findings:

- 1. The private colleges and universities of Tennessee met 45.72 percent of the risk management and property insurance criteria; performance by institutional category was: Category I 44.02 percent, Category II 39.13 percent, and Category III 53.71 percent.
- 2. Six of the twenty-seven institutions (22.22 percent) received an adjectival rating of satisfactory, based upon percent of risk management and property insurance criteria met. Institutions receiving a satisfactory rating were evenly divided among the three institutional categories.
- 3. An assessment of risk management and property insurance practices, by use of criteria, revealed ten problem areas common to all institutional categories.
- 4. The most common form of property insurance coverage carried by Tennessee's private colleges and universities was protection against vandalism and malicious mischief (73.1 percent). Other forms of property insurance coverage carried by the institutions were: builders' risk (57.7 percent), glass breakage (26.9 percent), inland marine (23.1 percent), and boiler and machinery (7.7 percent).

- 5. Tennessee's private colleges and universities utilize property insurance deductibles that ranged from zero, or first dollar coverage, to \$50,000. The most common deductible assumed by the institutions was \$100, by nine institutions or 32.1 percent. Only four of the institutions utilize deductibles of \$25,000 or more, with only one using a \$50,000 deductible.
- 6. The self-assumption of risk effort, when expressed as a ratio of property insurance deductible to annual operating budget, ranged from zero to 4.22 percent.
- 7. Eight of the twenty-seven institutions (29.63 percent) assumed a property insurance deductible equal to or greater than the recommended amount of .1 percent per occurrence and 1 percent aggregate of annual operating budget.
- 8. Historical data pertaining to property insurance experiences of Tennessee's private colleges and universities were found to be quite sparse; only fourteen of the twenty-eight (50 percent) institutions provided data covering two or more years. Additionally, only two institutions provided data covering the ten-year period 1966 through 1975.
- 9. The insured loss/premium ratio for Tennessee's private colleges and universities for the four-year period 1972 through 1975 was 329.32 percent.
- 10. When evaluated using the Florida criteria, Tennessee's private colleges and universities included in this study did not constitute a suitable group for the purpose of full self-insurance.

However, selected institutions from this group, through systematic annual contributions to a reserve fund, could perhaps establish a successful partial self-insurance fund.

## III. RECOMMENDATIONS

The following recommendations are suggested as actions to assist in improving the risk management and property insurance practices of Tennessee's private colleges and universities:

- 1. An in-service education program that includes both faculty and staff should be initiated to increase risk management and property insurance awareness. The development of this in-service education program could best be developed by utilizing the assistance of the educational service division of commercial insurance companies and/or the expertise available from professional associations such as the National Association of Colleges and University Business Officers. In-service education programs should be individualized by each institutional insurance manager to provide for situations particular to that college or university.
- 2. Immediate action should be taken by each institution to resolve those problem areas identified by the application of risk management and property insurance criteria which were developed by a panel of nationally recognized experts. The formation of an ad hoc committee, composed of faculty and staff and chaired by the institutional manager of insurance programs, is a sound approach to resolving these problem areas. Consultants should be retained to assist the committee if additional expertise is required on a particular topic.

- 3. Institutions should work directly with insurance brokers when purchasing commercial insurance coverage for their facilities and contents. Institutional insurance managers should furnish the broker guidelines as to the type of coverage desired and permit the broker to obtain the desired coverage on a competitive basis in the open market. Institutional dependence upon insurance agents for guidance should be eliminated or reduced to an absolute minimum because the agent's judgment could be easily biased by his/her financial interests.
- 4. Institutions should assess the forms of property insurance carried on their facilities and require that all essential coverage be procured. Forms of coverage should be based upon an objective assessment of the type facility construction, risks confronting the facilities and the ability of the institution to self-assume risks. A review of essential coverage should be conducted on an annual basis. Additionally, a comprehensive review should be made prior to entry into a new policy period. Coverage should be amended to include new construction and/or additional risks incurred during the policy term.
- 5. Institutions should adopt property insurance deductible amounts that are commensurate with their financial capacity. The adoption of .l percent per occurrence and l percent aggregate of annual operating budget as a property insurance deductible amount is suggested. By utilizing deductibles that are commensurate with their financial capacity, institutions can realize savings in the 25 to 50 percent of premium range.

- 6. Institutions possessing excellent insured loss/premium ratios should use these records to obtain more favorable insurance rates. Each institution should provide these data to the broker responsible for procuring commercial coverage. Long histories of loss prevention should provide for the placement of an institution into a more favorable rate classification.
- 7. Each institution should take immediate action to establish a data base, from which property information would be readily retrievable. The data should pertain to property insurance experiences to include value of buildings, value of contents, amount of insurance in force, applicable deductible amount, premiums and loss data. This information is essential in order to allow a cost analysis of the risk management and property insurance practices.
- 8. Tennessee's private colleges and universities should maintain commercial insurance coverage in preference to adopting a program of total self-insurance. However, action such as increased deductible amounts, improved risk management and property insurance practices, competitive bids, etc., should be used when appropriate to reduce the cost of commercial insurance coverage.
- 9. The Tennessee Council of Private Colleges should form a Risk Management and Insurance Committee. The purpose of the committee would be to increase institutional awareness of risk management and property insurance practices as well as to advise institutions on possible solutions to common problems. Membership on the committee would be composed of approximately ten institutional business officers

who would serve rotating terms. The committee would retain consultants on an "as needed basis" to provide technical expertise.

## IV. CONCLUDING STATEMENT

The study indicated that risk management and property insurance is an area in which Tennessee's private colleges and universities can realize substantial monetary savings. This area of institutional management has long been neglected, and the failure to adopt sound practices has significantly increased the cost of commercial insurance coverage. The impetus for a sound risk management and property insurance insurance program must originate at the policy-making level. Improved risk management and property insurance practices coupled with commercial insurance coverage was shown to be the most cost-effective option available for Tennessee's private colleges and universities included in this study.

Other areas which evolved from the study that warrant further research included:

1. A cost analysis of the insurance management function at individual institutions is suggested in order to determine the most efficient staff composition. Many institutions appeared to minimize the number of personnel assigned to this function in order to reduce overhead. This practice has probably resulted in inadequate attention to the risk management and property insurance function, creating a false economy.

- 2. An analysis of the cost-effectiveness of group insurance brokers, i.e., denominational group programs, versus individual institutional purchases which utilize competitive techniques might also provide a suitable topic for additional research.
- 3. Further study could be undertaken to determine the most cost effective methods of providing initial capital for a self-insurance fund composed of private college and university membership.

Although the data contained in this study were collected from institutions in Tennessee, the implications are probably valid for other private colleges and universities throughout the nation. Thus, the study's recommendations have wide applicability and the potential to provide useful guidelines for numerous institutions.

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APPENDICES

## APPENDIX A

CORRESPONDENCE TO STATE ASSOCIATIONS OF PRIVATE COLLEGES AND UNIVERSITIES AND TO STATE INSURANCE FUNDS

January 13, 1976 1128 Delray Road Knoxville, TN 37919

I am presently a doctoral student in Educational Administration and Supervision at the University of Tennessee at Knoxville. As my doctoral research topic, I have decided to explore the feasibility of developing a self-insurance program for private institutions of higher education within the State of Tennessee. The proposed model would be a co-operative program through which all, or as many institutions as desired, could self-insure buildings and contents in a self-insurance pool or co-operative effort rather than utilizing commercial insurance companies.

Therefore, I am taking this opportunity to inquire if such a self-insurance pool or co-operative exists in your state or region? Additionally, are you aware of existing studies conducted on the feasibility of such a program?

Request you forward this information as soon as possible in order that my study may proceed in a timely manner. I am looking forward to your response to this inquiry.

Sincerely,

Bob P. Lilly

Dear Sirs:

We at the University of Tennessee are presently conducting a study of the risk management and property insurance practices of private colleges and universities of Tennessee. In order that we may explore all present state sponsored property insurance programs that cover state colleges and universities, request we be furnished the following information:

(1) Does your state have a state-sponsored or governed property insurance program for your <u>public</u> colleges and universities?

## If yes

(2) May we be furnished a historical discription of the plan to include type of property included, cost/loss ratios, management expenses, accumulated financial reserves, etc.

Any assistance that you can furnish us on this subject will be greatly appreciated.

Sincerely,

Bob P. Lilly

APPENDIX B

CORRESPONDENCE PERTAINING TO THE DEVELOPMENT OF RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA

July 5, 1976

| n    |  |
|------|--|
| Dear |  |
| DCui |  |

I am presently developing a study of the property insurance practices of private colleges and universities in Tennessee. The purpose of the study will be to develop alternative methods for providing property insurance protection to these institutions. As part of my study it has become necessary to identify those ingredients which are considered essential for an adequate risk management and property insurance program. I have identified certain criteria from the literature; however, there are probably other criteria that are of equal importance that have been omitted.

Therefore, I am requesting your assistance as a participating member of a panel of experts who will assist in the formulation of the criteria through the use of Delphi technique. The proposed panel will be composed of persons who possess the greatest expertise on this subject. The attached suggested criteria, along with the panel member's feedback of additions, deletions, and/or corrections will constitute Probe I. To indicate your willingness to serve as a panel member please complete Probe I according to the directions and return it in the enclosed self-addressed stamped envelope not later than July 19, 1976.

If you desire, I will furnish you an abstract of the study, a list of the criteria developed by the panel, and the names of the individuals composing the panel. Your favorable consideration of this request and willingness to participate in this project will be appreciated.

Sincerely,

Bob P. Lilly

BPL:ces

Enclosure

DELPHI PROBE I TO DETERMINE: "RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA"

The following eight (8) criteria are those most readily identified in the literature. Please make any corrections or deletions to this list; also add those essential criteria that you believe are omitted.

The institution has:

Developed a statement of policy pertaining to risk management\* and insurance\*.

Self-assumed risks in accordance with their financial capacity.

Had its facilities appraised by an independent agent such as an engineering appraisal firm.

Had its facilities reappraised on an annual\* or biannual\* basis.

Placed its property insurance with an agent on a competitive bid basis.

A staff education program designed to promote awareness of risk management policies\*, procedures\*, and problems\*.

A formal program designed to identify\* and reduce risks\*.

Designated a specific officer of the institution to coordinate all insurance programs.

ADDITIONAL CRITERIA:

\*Note: In the event you believe that those functions which are designated by an asterisk (\*) should be considered as a separate entity, please mark by underlining.

| •    |  |
|------|--|
| Dear |  |
| Deal |  |

Thank you so very much for your input to Probe I. Each panel member has suggested criteria that should be used to evaluate a college or university risk management and property insurance program. In some cases it has been necessary to modify the exact phrasing of the suggested criteria in order to accommodate all responders; however, I have attempted to include the essential elements of your input in all cases.

Enclosed is Probe II which is a consolidated list of criteria submitted by panel members. You are to rate each item on a scale of 1 to 5 indicating the "level of importance" you believe the item would have in determining the effectiveness of a risk management and property insurance program. In order that the study may proceed in a timely manner it is requested that your response to Probe II be returned in the enclosed self-addressed, stamped envelope by August 27, 1976.

Thank you very much for your cooperation and valuable contribution to this study.

Sincerely,

Bob P. Lilly

Enclosure

# TO DETERMINE RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA PROBE 11:

Respond to each of the following statements by indicating the level of importance you believe each criteria would have in evaluating a college or university risk management and property insurance program. DIRECTIONS:

Choices: 5 - absolutely essential

4 - very important

3 - of some importance

2 - of little importance

1 - not important

Suggested Criteria

Your Response

The institution has:

Appointed a specific person to develop and administer all risk management and insurance programs.

Developed a statement of policy for the institution pertaining to insurance and risk management.

Provided the insurance and risk management department with the resources (staff and funding) to carry out an effective risk management program.

Identified the probabilities of loss.

Studied risk funding methods.

Decided the method of treating risk.

## Suggested Criteria

Taken steps to avoid some risks.

Taken steps to spread risks.

Developed programs to prevent or reduce risk.

Determined level of risk assumption.

Determined those risks which can be or should be transferred.

Studied and evaluated past loss experience.

Calculated maximum and probable loss expectancy.

Studied and evaluated water supplies, fire fighting, and fire prevention capabilities. Reviewed plans for construction and remodeling and including risk management recommendations.

Conducted insurance negotiations by invitation to selected sources and/or open bidding.

Uses both direct writers and stock insurance companies.

Determined the financial solvency of insurance companies with which they dobusiness.

Prepared bid specifications.

Enforced rules and procedures and has monitored and measured the results of the risk management program.

## Suggested Criteria

Determined if brokers or agents are willing to provide service on fee or commission basis.

Developed specific programs to protect valuable papers and records.

Designed and developed insurance record and accounting system.

Developed procedures for adjustment and settlement of self-insured losses.

An annual report prepared for the board of trustees, directors, and officers.

Consulted with similar institutions as to both common problems and common solutions thereto.

Self-assumed risks in accordance with their financial capacity.

Had its facilities appraised for value by an engineering appraisal firm or a qualified in-house person.

Had its facilities reappraised at least biannually.

A staff education program designed to promote awareness of risk management policies and practices and risk reduction or elimination techniques.

A formal program designed to identify and reduce risks.

Adopted a self-insurance "guideline" (on a per occurrence or annual aggregate basis) related to the institution's financial resources and spread-of-risk.

Identified all exposures of accidental loss to property (direct and indirect loss and damage).

## Undertaken a formal risk control/property conservation program with annual Ongoing system of inspections of buildings including evaluation of all Evaluated the financial risk inherent in these exposures by means of analysis of past loss frequency and severity and forecasts of future Plan of evaluation of all new construction planning relative to fire A plan of evaluating expenditures to reduce risk including the cost-effectiveness and the authority to authorize expenditures. protection engineering, using professional outside authority. physical inspections of major facilities. Suggested Criteria frequency and severity. occupancy changes. Your response

PLEASE FURNISH THE FOLLOWING INFORMATION:

Current position or job titles:

Complete mailing address:

Office telephone number:

## APPENDIX C

PANEL OF RISK MANAGEMENT AND PROPERTY INSURANCE EXPERTS

## PANEL OF RISK MANAGEMENT AND PROPERTY INSURANCE EXPERTS

- Robert H. Barnett. Vice President and Treasurer of Wells College; member of the National Association of College and University Business Officers' Insurance and Risk Management Committee, 1972-73.
- Robert M. Beth. Director of Risk Management, Stanford University; past president of the University Insurance Managers Association.
- H. Felix Kloman. President, Risk Planning Group, Inc., Darien, Connecticut; directed "University Insurance Report 1970," a comprehensive study sponsored by the University Insurance Managers Association.
- Roberta Maddox. Director of Business and Finance Services, Florida Board of Regents; member of the National Association of College and University Business Officers' Insurance and Risk Management Committee, 1976-77.
- Stanley R. Tarr. Director of Risk Management, Rutgers University; former member of the National Association of College and University Business Officers' Insurance and Risk Management Committee.

APPENDIX D

RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA

## RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA

## Your college or university has:

- 1. Appointed a specific person to develop and administer all risk management and insurance programs.
- 2. Developed a statement of policy for the institution pertaining to insurance and risk management.
- 3. Identified the probabilities of loss.
- 4. Decided the method of treating risk.
- 5. Studied risk funding methods.
- 6. Taken steps to avoid some risks.
- 7. Taken steps to spread risks.
- 8. Developed a formal program designed to identify, prevent, and/or reduce risks.
- 9. Determined level of risk assumption.
- 10. Determined those risks which can be or should be transferred.
- 11. Studied and evaluated past loss experience.
- 12. Studied and evaluated water supplies, fire fighting, and fire prevention capabilities.
- 13. Reviewed plans for construction and remodeling and included risk management recommendations.
- 14. A plan of evaluation of all new construction planning relative to fire protection engineering, using a professional outside authority.
- 15. Enforced rules and procedures and has monitored and measured the results of the risk management program.
- 16. Prepared an annual report for the board of trustees, directors, and officers concerning risk management and property insurance costeffectiveness.

- 17. Consulted with similar institutions as to both common problems and common solutions thereto.
- 18. A staff education program designed to promote awareness of risk management policies and practices and risk reduction or elimination techniques.
- 19. Developed a self-insurance "guideline" (on a per occurrence or annual aggregate basis) related to the institution's financial resources and spread-of-risk.
- 20. Undertaken a formal risk control/property conservation program with annual physical inspections of major facilities.
- 21. An ongoing system of inspections of buildings including evaluation of all occupancy changes.
- 22. A plan of evaluating expenditures to reduce risk including the cost-effectiveness and the authority to authorize expenditures.
- 23. Self-assumed risks in accordance with its financial capacity.

APPENDIX E

RISK MANAGEMENT AND PROPERTY INSURANCE QUESTIONNAIRE WITH RELATED CORRESPONDENCE

October 8, 1976 1128 Delray Road Knoxville, TN 37919

Mr. Nyles Ayers Tennessee Council of Private Colleges 1719 West End Building Nashville, TN 37203

Dear Mr. Ayres,

As a word of introduction, I am a doctoral student working under the supervision of Dr. William H. Coffield at the University of Tennessee, Knoxville. You may recall the discussion that I had with you and Dr. Coffield, during one of your visits to UTK, about my doctoral research proposal pertaining to risk management and property insurance practices of the private colleges and universities in Tennessee. During the discussion it was suggested that a cover letter under your signature, along with my letter and questionnaire would probably facilitate the collection of data from Council member institutions. In addition to a cover letter I would appraciate a current list of the presidents or chancellors of each member institution, since this is the person to whom the correspondence will be directed.

Enclosed is a draft copy of the questionnaire and the cover letter that I will send to each institutional president or chancellor of those private colleges and universities in Tennessee which are both a member of the Tennessee Council of Private Colleges and are accredited by the Southern Association of Colleges and Schools. The three-part questionnaire was developed with the assistance of a panel of five nationally recognized experts in the area of risk management and property insurance. The questionnaire is designed to evaluate risk management and property insurance practices and provide data for the development of alternative methods of providing property insurance protection. I believe that the study will be of great value to Council member institutions.

Your assistance in this phase of the study will be greatly appreciated. Of course, upon completion of the study a copy will be furnished to you along with an abstract of the study to each participating institution.

Sincerely,

Bob P. Lilly

Enclosures

MEMO TO: Private College Presidents

FROM: Nyles C. Ayers, President

From time to time, the private sector is asked to provide information about management practices. Some questionnaires are a nuisance; others hold the potential for providing valuable information which can be used as a basis for sound decisions on each campus. I believe the enclosed survey to be such, and, therefore, I agreed to draft this covering memo to assist Mr. Lilly in his effort.

I encourage each private college president to have the questionnaire completed and returned to Mr. Lilly.

NCA:ch

We at the University of Tennessee at Knoxville are very much concerned about the cost of insurance coverage for the physical facilities (buildings and contents) of higher educational institutions in the State. By undertaking an indepth study of the subject, it is believed that feasible alternatives can be identified which will result in considerable savings to each institution. Additionally, the study will make recommendations for the improvement of institutional risk management programs.

In order for the study to be based upon the most timely and accurate data available we have developed the attached questionnaire which should be completed by the person in your institution who is most familiar with the property insurance program. The three-part questionnaire was developed with the assistance of a panel of five nationally recognized experts in the area of risk management and property insurance. The response by your institution will be kept strictly confidential and your institution will not be identified by name or geographic location in the study. Upon completion of the study we will furnish each of the participating institutions a copy of an abstract of the study and a complete copy of the study to the Tennessee Council of Private Colleges, which will be available for your use.

The questionnaire will need to be completed and returned to me by November 15, 1976 to assure the study is completed in a timely manner. If your institutional representative desires my assistance to extract the data from your records, I will be most happy to visit your campus for this purpose. My telephone numbers are: 615-974-2214 (weekdays) and 615-693-0597 (evenings and weekends).

Sincerely,

Bob P. Lilly

Enclosures

Recently we sent you a questionnaire concerning risk management and property insurance practices of colleges and universities in Tennessee. Since we have not received a response from you as of this date, I am enclosing a copy of the questionnaire in the event it was misplaced or lost.

In order for our study to be truly meaningful, we are attempting to obtain data from as many representative institutions in the State as possible. Therefore, we consider your input into the study as being of vital importance and look forward to hearing from you at your earliest convenience.

Sincerely,

Bob P. Lilly

**Enclosures** 

# RISK MANAGEMENT SURVEY OF SELECTED PRIVATE COLLEGES AND UNIVERSITIES IN TENNESSEE

## PART I - RISK MANAGEMENT DATA

Please indicate your response to each of the following by placing a check ( $\checkmark$ ) beside the response chosen.

| Yes | No | 1   | Your college or university has:  |
|-----|----|-----|--|
|     |    | 1.  | Appointed a specific person to develop and administer all risk management and insurance programs.                                      |
|     |    | 2.  | Developed a statement of policy for the institution pertaining to insurance and risk management.                                       |
|     |    | 3.  | Identified the probabilities of loss.  |
|     |    | 4.  | Decided the method of treating risk.   |
|     |    | 5.  | Studied risk funding methods.  |
|     |    | 6.  | Taken steps to avoid some risks.   |
|     |    | 7.  | Taken steps to spread risks.   |
|     |    | 8.  | Developed a formal program designed to identify, prevent and/or reduce risks.  |
|     |    | 9.  | Determined level of risk assumption.   |
|     |    | 10. | Determined those risks which can be or should be transferred.  |
|     |    | 11. | Studied and evaluated past loss experience.  |
|     |    | 12. | Studied and evaluated water supplies, fire fighting, and fire prevention capabilities.   |
|     |    | 13. | Reviewed plans for construction and remodeling and included risk management recommendations.   |
|     |    | 14. | A plan of evaluation of all new construction planning relative to fire protection engineering, using a professional outside authority. |
|     |    | 15. | Enforced rules and procedures and has monitored and measured the results of the risk management program.                               |

| Ye | s No  | ī   |  |                                   |
|----|-------|-----|--|-----------------------------------|
|    |       | 16. | Prepared an annual report for the directors, and officers concerning property insurance cost-effective   | ing risk management and           |
|    |       | 17. | Consulted with similar institution problems and common solutions the                                     |                                   |
|    |       | 18. | A staff education program design<br>of risk management policies and<br>reduction or elimination technic  | practices and risk                |
|    |       | 19. | Developed a self-insurance "guid<br>occurrence or annual aggregate t<br>institution's financial resource | pasis) related to the             |
|    |       | 20. | Undertaken a formal risk control program with annual physical instacilities.                             |                                   |
|    |       | 21. | An ongoing system of inspections evaluation of all occupancy char  | s of buildings including<br>nges. |
|    |       | 22. | A plan of evaluating expenditure including the cost-effectiveness authorize expenditures.                |                                   |
|    |       |     | PART II - OTHER INFORMATION  | 1                                 |
| 1. |       |     | fiscal year (FY) operating budget<br>your institution was:   | t (excluding capital              |
|    | FY 19 | 75  | FY 1974  | FY 1973                           |
|    | FY 19 | 72  | FY 1971  | FY 1970                           |
|    | FY 19 | 169 | FY 1968  | FY 1967                           |
|    | FY 19 | 66  |  |                                   |

| 2. | Listed below are common forms of propert Please indicate, by placing a check $(\checkmark)$ the left those forms of coverage your in Additionally, indicate those forms of co desirable for all institutions of higher $(X)$ in the spaces provided to the right | in the spaces provided to<br>stitution presently has.<br>verage you believe are<br>education by placing an |
|----|--|--|
|    | fire and extended coverage<br>builders' risk insurance   | _vandalism and malicious<br>mischief   |
|    |  | inland marine insur-<br>ance   |
|    | other (specify)  |  |
| 3. | Please provide the name and telephone nur<br>completing this questionnaire. (Persona<br>unless clarification of data is essentia   | 1 contact will not be made   |
|    | NAME   |  |
|    | TELEPHONE NUMBER   |  |
|    |  |  |

PART III - PREMIUM, VALUE, AND LOSS DATA

Please furnish the following information pertaining to premiums, values, and loss experience for the 10-year period 1966-1975. If data is not available for a specific year, please complete those years for which you have data.

| Total Appraised Value of Buildings  Total Appraised Value of Contents  Amount of Property Insurance in Effect |     |      |      |      |      |
|---|-----|------|------|------|------|
| Total Appraised Value of Contents<br>Amount of Property Insurance in Effect                                   | -   |      |      |      |      |
| Amount of Property Insurance in Effect  |     |      |      |      |      |
|   |     |      |      |      |      |
| Applicable Deductible Clause  |     |      |      |      |      |
| Total Property Insurance Premiums   |     |      |      |      |      |
| Amount of Largest Property Loss   |     |      |      |      |      |
| Aggregate Annual Payments Received for Insured Losses   |     |      |      |      |      |
| Aggregate Annual Uninsured Losses   |     |      |      |      |      |
| 1970  | 970 | 1969 | 1968 | 1967 | 1966 |
| Total Appraised Value of Buildings  |     |      |      |      |      |
| Total Appraised Value of Contents   |     |      |      |      |      |
| Amount of Property Insurance in Effect  |     |      |      |      |      |
| Applicable Deductible Clause  |     |      |      |      |      |

|   | 1970 | 1970 1969 | 1968 | 1968 1967 1966 | 1966 |
|---|------|-----------|------|----------------|------|
| Total Property Insurance Premiums                     |      |           |      |                |      |
| Amount of Largest Property Loss                       |      |           |      |                |      |
| Aggregate Annual Payments Received for Insured Losses |      |           |      |                |      |
| Aggregate Annual Uninsured Losses                     |      |           |      |                |      |

APPENDIX F

PRIVATE COLLEGES AND UNIVERSITIES RECEIVING QUESTIONNAIRES

### PRIVATE COLLEGES AND UNIVERSITIES RECEIVING QUESTIONNAIRES

## Name of Institution Location

Aguinas Junior College Nashville Belmont College Nashville Bethel College McKenzie Bryan College Dayton Carson-Newman College Jefferson City Christian Brothers College Memphis Cumberland College Lebanon David Lipscomb College Nashville \*Fisk University Nashville \*Freed-Hardeman College Henderson George Peabody College for Teachers Nashville \*Hiwassee College Madisonville \*John A. Gupton College Nashville Johnson Bible College Knoxville King College Bristol | Knoxville College Knoxville \*Lambuth College Jackson Lane College Jackson \*Lee College Cleveland LeMoyne-Owen College Memphis Lincoln Memorial University Harrogate Martin College Pulaski Maryville College Maryville \*Meharry Medical College Nashville Memphis Academy of Arts Memphis Milligan College Milligan Morristown College Morristown Scarritt College Nashville South, University of the Sewanee Southern College of Optometry Memphis Southern Missionary College Collegedale Southwestern at Memphis Memphis \*Tennessee Wesleyan College Athens Trevecca Nazarene College Nashville \*Tusculum College Greeneville Union University Jackson

Vanderbilt University

Nashville

<sup>\*</sup>Indicates institutions that did not respond to the question-naire.

APPENDIX G

CORRESPONDENCE RELATING TO THE PANEL'S EVALUATION OF CRITERION NUMBER 23

December 10, 1976

| Dear |  |
|------|--|
| Dear |  |

I am pleased to report that our study pertaining to the risk management and property insurance practices of private colleges and universities in Tennessee is progressing satisfactorily. Your assistance in the development of the risk management criteria for the study was most helpful. As the study has progressed and data has been collected from each institution we have identified the need to determine whether or not the institutions met one of the criteria: "has self-assumed risks in accordance with their financial capacity."

After a thorough review of the literature we are unable to identify specific guidelines that could be applied to this criteria. We are aware that the total financial capacity of the institution should be considered; however, we only have access to the annual operating budget. Therefore, it is believed that a comparison of the annual operating budget and the deductible clause of the property insurance could be used for this purpose. Therefore, I am asking your assistance in this evaluation. The enclosure lists each institution along with the applicable deductible clause. Please indicate in the space provided whether or not you, as a nationally recognized scholar on the subject, believe the institution "has self-assumed risks in accordance with their financial capacity."

Your assistance and timely response to this request will be appreciated.

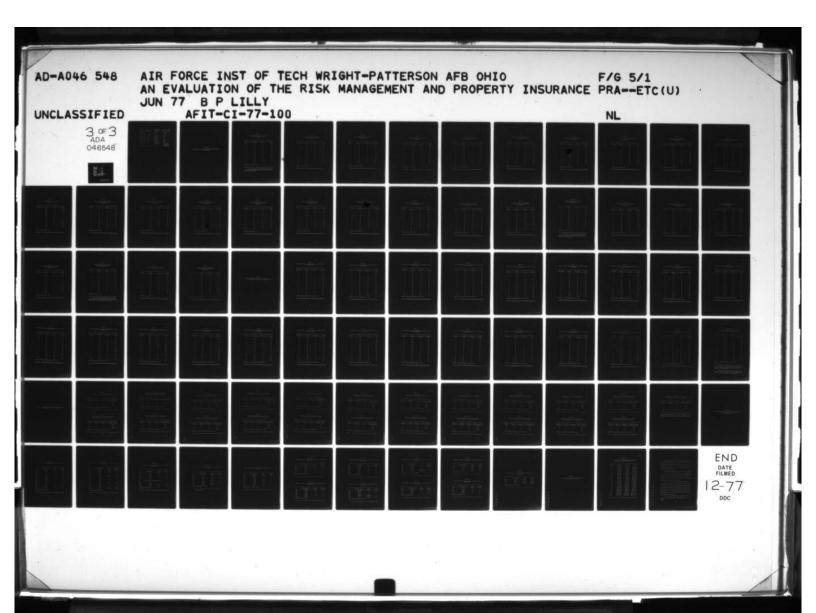
Sincerely,

Bob P. Lilly

Enclosure

PLEASE INDICATE YOUR RESPONSE TO WHETHER OR NOT YOU BELIEVE THAT EACH INSTITUTION LISTED BELOW HAS "SELF-ASSUMED RISKS IN ACCORDANCE WITH THEIR FINANCIAL CAPACITY" BY PLACING A CHECK ( ) IN THE SPACE PROVIDED

| Yes | No | Institution | Annual Operating<br>Budget | Property Insurance<br>Deductible Clause |
|-----|----|-------------|----------------------------|---|
|     |    |             |                            |   |
|     | 1  | A           | \$480,582                  | None                                    |
|     |    | Υ           | \$593,000                  | \$25,000                                |
|     |    | G           | \$752,181                  | \$100                                   |
|     |    | AZ          | \$772,194                  | \$1,000                                 |
|     |    | V           | \$973,952                  | \$100                                   |
|     |    | С           | \$1,246,413                | \$100                                   |
|     |    | 0           | \$1,285,689                | \$1,000                                 |
|     |    | D           | \$1,672,442                | \$100                                   |
|     |    | F           | \$2,002,533                | \$100                                   |
|     |    | АУ          | \$2,073,259                | \$1,000 fire/<br>100 theft              |
|     |    | Z           | \$2,241,000                | \$5,000                                 |
|     |    | U           | \$2,298,134                | \$25,000                                |
|     |    | N           | \$2,600,000                | \$100                                   |
|     |    | AQ          | \$2,690,856                | \$100                                   |
|     |    | В           | \$2,717,383                | \$5,000                                 |
|     |    | Т           | \$2,742,000                | \$50,000                                |
|     |    | Р           | \$2,921,850                | \$1,000                                 |
|     |    | AT          | \$2,970,000                | \$100                                   |
|     |    | W           | \$3,055,000                | \$25,000                                |
|     |    | R           | \$3,188,752                | \$2,500                                 |
|     |    |             |                            |   |



| Yes | No | Institution | Annual Operating<br>Budget | Property Insurance<br>Deductible Clause    |
|-----|----|-------------|----------------------------|--|
|     |    | AX          | \$3,938,092                | 10 percent of<br>loss                      |
|     |    | AW          | \$4,100,000                | \$5,000                                    |
|     |    | E           | \$4,904,528                | \$500                                      |
|     |    | AV          | \$4,971,336                | \$100                                      |
|     |    | Н           | \$6,956,531                | \$500                                      |
|     |    | K           | \$12,000,000               | \$500                                      |
|     |    | AO          | \$110,530,000              | \$5,000 which disappears at \$25,000 level |

APPENDIX H

RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA BY INSTITUTION

TABLE XVII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION A

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | Yes      |
| 2        | Yes      | 14       | Yes      |
| 3        | Yes      | 15       | Yes      |
| 4        | Yes      | 16       | Yes      |
| 5        | Yes      | 17       | Yes      |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | Yes      |
| 8        | Yes      | 20       | Yes      |
| 9        | Yes      | 21       | Yes      |
| 10       | Yes      | 22       | Yes      |
| 11       | Yes      | 23*      | No       |
| 12       | Yes      |          |          |
|          |          |          |          |

Percent of criteria met: 91.30

 $<sup>\</sup>star Item~23$  in this and succeeding tables was determined by the panel of experts using property insurance policy deductibles and annual operating budgets.

TABLE XVIII

## INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION Y

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | No       | 13       | No       |
| 2        | No       | 14       | Yes      |
| 3        | No       | 15       | No       |
| 4        | Yes      | 16       | No       |
| 5        | Yes      | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | No       |
| 3        | No       | 20       | No       |
| 9        | No       | 21       | Yes      |
| 10       | No       | 22       | No       |
| 11       | No       | 23       | Yes      |
| 12       | Yes      |          |          |

Percent of criteria met: 34.78

TABLE XIX

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION G

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | Yes      |
| 2        | No       | 14       | No       |
| 3        | No       | 15       | No       |
| 4        | Yes      | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | No       | 19       | No       |
| 8        | No       | 20       | No       |
| 9        | Yes      | 21       | Yes      |
| 10       | No       | 22       | No       |
| 11       | No       | 23       | No       |
| 12       | Yes      |          |          |

Percent of criteria met: 30.43

TABLE XX

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION AZ

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | Yes      |
| 2        | Yes      | 14       | Yes      |
| 3        | Yes      | 15       | No       |
| 4        | Yes      | 16       | Yes      |
| 5        | Yes      | 17       | Yes      |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | No       |
| 8        | Yes      | 20       | Yes      |
| 9        | Yes      | 21       | No       |
| 10       | No       | 22       | No       |
| 11       | Yes      | 23       | Yes      |
| 12       | Yes      |          |          |

Percent of criteria met: 73.91

TABLE XXI

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION V

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | No       | 13       | Yes      |
| 2        | No       | 14       | Yes      |
| 3        | No       | 15       | No       |
| 4        | No       | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | No       | 19       | No       |
| 8        | No       | 20       | No       |
| 9        | No       | 21       | No       |
| 10       | No       | 22       | No       |
| 11       | No       | 23       | No       |
| 12       | No       |          |          |

Percent of criteria met: 13.04

TABLE XXII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION C

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | Yes      |
| 2        | No       | 14       | Yes      |
| 3        | No       | 15       | No       |
| 4        | No       | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | No       | 19       | No       |
| 8        | No       | 20       | No       |
| 9        | No       | 21       | Yes      |
| 10       | No       | 22       | No       |
| 11       | No       | 23       | No       |
| 12       | Yes      |          |          |

Percent of criteria met: 26.09

TABLE XXIII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION 0

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | No       |
| 2        | Yes      | 14       | No       |
| 3        | No       | 15       | Yes      |
| 4        | es       | 16       | No       |
| 5        |          | 17       | Yes      |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | Yes      |
| 8        | Yes      | 20       | Yes      |
| 9        | Yes      | 21       | Yes      |
| 10       | No       | 22       | No       |
| 11       | No       | 23       | Yes      |
| 12       | Yes      |          |          |

Percent of criteria met: 60.87

TABLE XXIV

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION D

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | No       |
| 2        | No       | 14       | No       |
| 3        | No       | 15       | No       |
| 4        | No       | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | No       |
| 8        | No       | 20       | No       |
| 9        | No       | 21       | Yes      |
| 10       | No       | 22       | No       |
| 11       | Yes      | 23       | No       |
| 12       | No       |          |          |

Percent of criteria met: 21.74

TABLE XXV INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION F

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | No       | 13       | Yes      |
| 2        | Yes      | 14       | Yes      |
| 3        | No       | 15       | No       |
| 4        | No       | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | Yes      | 18       | Yes      |
| 7        | No       | 19       | Yes      |
| 8        | No       | 20       | No       |
| 9        | No       | 21       | Yes      |
| 10       | No       | 22       | Yes      |
| 11       | Yes      | 23       | No       |
| 12       | Yes      |          |          |

Percent of criteria met: 43.48

TABLE XXVI

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION AY

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | No       |
| 2        | No       | 14       | No       |
| 3        | No       | 15       | No       |
| 4        | No       | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | No       | 19       | No       |
| 8        | No       | 20       | Yes      |
| 9        | No       | 21       | No       |
| 10       | No       | 22       | No       |
| 11       | No       | 23       | No       |
| 12       | No       |          |          |

Percent of criteria met: 13.04

TABLE XXVII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION Z

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | Yes      |
| 2        | No       | 14       | Yes      |
| 3        | Yes      | 15       | Yes      |
| 4        | Yes      | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | No       | 19       | Yes      |
| 3        | Yes      | 20       | Yes      |
| 9        | Yes      | 21       | Yes      |
| 10       | No       | 22       | Yes      |
| 11       | Yes      | 23       | Yes      |
| 12       | Yes      |          |          |

Percent of criteria met: 69.57

TABLE XXVIII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION U

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | No       | 13       | Yes      |
| 2        | No       | 14       | Yes      |
| 3        | Yes      | 15       | Yes      |
| 4        | Yes      | 16       | Yes      |
| 5        | Yes      | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | Yes      |
| 8        | Yes      | 20       | No       |
| 9        | Yes      | 21       | No       |
| 10       | Yes      | 22       | Yes      |
| 11       | Yes      | 23       | Yes      |
| 12       | Yes      |          |          |

Percent of criteria met: 73.91

TABLE XXIX

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION N

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | No       |
| 2        | No       | 14       | No       |
| 3        | Yes      | 15       | No       |
| 4        | Yes      | 16       | No       |
| 5        | Yes      | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | No       |
| 8        | No       | 20       | No       |
| 9        | No       | 21       | Yes      |
| 10       | Yes      | 22       | No       |
| 11       | Yes      | 23       | No       |
| 12       | Yes      |          |          |

Percent of criteria met: 43.48

TABLE XXX

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION AQ

| Criteria | Dagnayas | Conitantia | 0        |
|----------|----------|------------|----------|
| Criceria | Response | Criteria   | Response |
| 1        | Yes      | 13         | No       |
| 2        | Yes      | 14         | No       |
| 3        | No       | 15         | No       |
| 4        | Yes      | 16         | No       |
| 5        | No       | 17         | No       |
| 6        | Yes      | 18         | No       |
| 7        | Yes      | 19         | No       |
| 8        | No       | 20         | Yes      |
| 9        | Yes      | 21         | Yes      |
| 10       | Yes      | 22         | No       |
| 11       | Yes      | 23         | No       |
| 12       | Yes      |            |          |

Percent of criteria met: 47.83

TABLE XXXI

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION B

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | No       | 13       | No       |
| 2        | No       | 14       | No       |
| 3        | No       | 15       | No       |
| 4        | No       | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | No       |
| 8        | No       | 20       | No       |
| 9        | No       | 21       | No       |
| 10       | No       | 22       | No       |
| 11       | No       | 23       | Yes      |
| 12       | No       |          |          |

Percent of criteria met: 13.04

TABLE XXXII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION T

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | Yes      |
| 2        | Yes      | 14       | Yes      |
| 3        | Yes      | 15       | Yes      |
| 4        | Yes      | 16       | Yes      |
| 5        | Yes      | 17       | No       |
| 6        | Yes      | 18       | Yes      |
| 7        | No       | 19       | No       |
| 8        | No       | 20       | Yes      |
| 9        | No       | 21       | Yes      |
| 10       | Yes      | 22       | Yes      |
| 11       | Yes      | 23       | Yes      |
| 12       | Yes      |          |          |

Percent of criteria met: 78.26

TABLE XXXIII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INC. "CE CRITERIA
INSTI.

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | No       | 13       | No       |
| 2        | No       | 14       | No       |
| 3        | No       | 15       | No       |
| 4        | No       | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | No       | 18       | No       |
| 7        | No       | 19       | No       |
| 8        | No       | 20       | No       |
| 9        | No       | 21       | No       |
| 10       | No       | 22       | No       |
| 11       | No       | 23       | No       |
| 12       | No       |          |          |

Percent of criteria met: 0

TABLE XXXIV

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION AT

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | No       |
| 2        | No       | 14       | No       |
| 3        | No       | 15       | No       |
| 4        | No       | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | No       | 19       | No       |
| 8        | No       | 20       | No       |
| 9        | No       | 21       | No       |
| 10       | No       | 22       | No       |
| 11       | No       | 23       | No       |
| 12       | No       |          |          |

Percent of criteria met: 08.70

TABLE XXXV

### INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION W

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | No       |
| 2        | No       | 14       | No       |
| 3        | Yes      | 15       | No       |
| 4        | Yes      | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | No       | 19       | Yes      |
| 8        | No       | 20       | No       |
| 9        | No       | 21       | Yes      |
| 10       | Yes      | 22       | No       |
| 11       | Yes      | 23       | Yes      |
| 12       | No       |          |          |
|          |          |          |          |

Percent of criteria met: 39.13

TABLE XXXVI

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION R

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | No       | 13       | No       |
| 2        | No       | 14       | Yes      |
| 3        | Yes      | 15       | No       |
| 4        | Yes      | 16       | Yes      |
| 5        | No       | 17       | Yes      |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | No       |
| 8        | No       | 20       | Yes      |
| 9        | No       | 21       | Yes      |
| 10       | Yes      | 22       | No       |
| 11       | Yes      | 23       | Yes      |
| 12       | Yes      |          |          |

Percent of criteria met: 56.52

TABLE XXXVII

#### INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION AX

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | Yes      |
| 2        | Yes      | 14       | Yes      |
| 3        | Yes      | 15       | Yes      |
| 4        | Yes      | 16       | No       |
| 5        | Yes      | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | No       |
| 8        | No       | 20       | Yes      |
| 9        | Yes      | 21       | Yes      |
| 10       | Yes      | 22       | Yes      |
| 11       | Yes      | 23       | *        |
| 12       | Yes      |          |          |

Percent of criteria met: 77.27

<sup>\*</sup>This item was not rated due to inconclusive evaluation by the panel of experts; i.e., two panel members had affirmative responses, two had negative responses, and the fifth member abstained from rating the item.

TABLE XXXVIII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION AW

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | Yes      |
| 2        | Yes      | 14       | Yes      |
| 3        | Yes      | 15       | Yes      |
| 4        | Yes      | 16       | No       |
| 5        | Yes      | 17       | Yes      |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | No       |
| 8        | Yes      | 20       | Yes      |
| 9        | No       | 21       | Yes      |
| 10       | Yes      | 22       | Yes      |
| 11       | Yes      | 23       | Yes      |
| 12       | Yes      |          |          |
|          |          |          |          |

Percent of criteria met: 82.61

TABLE XXXIX

#### INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION E

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | Yes      |
| 2        | No       | 14       | Yes      |
| 3        | Yes      | 15       | No       |
| 4        | Yes      | 16       | No       |
| 5        | Yes      | 17       | Yes      |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | No       |
| 8        | No       | 20       | Yes      |
| 9        | Yes      | 21       | Yes      |
| 10       | Yes      | 22       | Yes      |
| 11       | Yes      | 23       | No       |
| 12       | Yes      |          |          |

Percent of criteria met: 69.57

TABLE XL INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION AV

| 0        | 2        |          |          |
|----------|----------|----------|----------|
| Criteria | Response | Criteria | Response |
| 1        | Yes      | 13       | Yes      |
| 2        | No       | 14       | Yes      |
| 3        | Yes      | 15       | No       |
| 4        | No       | 16       | No       |
| . 5      | No       | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | No       |
| 8        | No       | 20       | No       |
| 9        | No       | 21       | No       |
| 10       | No       | 22       | No       |
| 11       | No       | 23       | No       |
| 12       | Yes      |          |          |
|          |          |          |          |

Percent of criteria met: 30.43

TABLE XLI INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION H

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | Yes      |
| 2        | No       | 14       | No       |
| 3        | No       | 15       | No       |
| 4        | No       | 16       | No       |
| 5        | Yes      | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | No       | 19       | No       |
| 8        | Yes      | 20       | No       |
| 9        | Yes      | 21       | Yes      |
| 10       | Yes      | 22       | No       |
| 11       | Yes      | 23       | No       |
| 12       | Yes      |          |          |

Percent of criteria met: 43.48

TABLE XLII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION AP

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | No       |
| 2        | Yes      | 14       | No       |
| 3        | Yes      | 15       | No       |
| 4        | Yes      | 16       | No       |
| 5        | Yes      | 17       | No       |
| 6        | Yes      | 18       | No       |
| 7        | Yes      | 19       | Yes      |
| 8        | No       | 20       | No       |
| 9        | Yes      | 21       | Yes      |
| 10       | Yes      | 22       | No       |
| 11       | No       | 23*      | No       |
| 12       | Yes      |          |          |

Percent of Criteria Met: 52.17

<sup>\*</sup>Institution AP's completed questionnaire was received after the panel of experts evaluated this item; therefore, this item was evaluated as to whether the deductible clause was in the 1/10 of 1% to 1% range of the annual operating budget.

TABLE XLIII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT
AND PROPERTY INSURANCE CRITERIA
INSTITUTION K

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | No       |
| 2        | No       | 14       | No       |
| 3        | Yes      | 15       | No       |
| 4        | No       | 16       | No       |
| 5        | Yes      | 17       | Yes      |
| 6        | Yes      | 18       | No       |
| 7        | No       | 19       | No       |
| 8        | No       | 20       | No       |
| 9        | Yes      | 21       | No       |
| 10       | Yes      | 22       | No       |
| 11       | No       | 23       | No       |
| 12       | No       |          |          |
|          |          |          |          |

Percent of criteria met: 30.43

TABLE XLIV INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERIA INSTITUTION AO

| Criteria | Response | Criteria | Response |
|----------|----------|----------|----------|
| 1        | Yes      | 13       | Yes      |
| 2        | No       | 14       | Yes      |
| 3        | Yes      | 15       | No       |
| 4        | Yes      | 16       | No       |
| 5        | No       | 17       | No       |
| 6        | Yes      | 18       | Yes      |
| 7        | Yes      | 19       | No       |
| 8        | No       | 20       | No       |
| 9        | Yes      | 21       | Yes      |
| 10       | Yes      | 22       | No       |
| 11       | Yes      | 23       | No       |
| 12       | Yes      |          |          |

Percent of criteria met: 56.52

### APPENDIX I

CONSOLIDATED PRESENTATION OF INSTITUTIONAL RESPONSES TO EACH RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION

TABLE XLV

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 1

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | No       | Т           | Yes      |
| G           | Yes      | Р           | No       |
| AZ          | Yes      | AT          | Yes      |
| ٧           | No       | W           | Yes      |
| С           | Yes      | R           | No       |
| D           | Yes      | AX          | Yes      |
| 0           | Yes      | AW          | Yes      |
| F           | No       | E           | Yes      |
| AY          | Yes      | AV          | Yes      |
| Z           | Yes      | Н           | Yes      |
| U           | No       | AP          | Yes      |
| N           | Yes      | K           | Yes      |
| AQ          | Yes      | AO          | Yes      |
|             |          |             |          |

Percent of institutions meeting criterion: 75.00

TABLE XLVI

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 2

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| A           | Yes      | В           | No       |
| Υ           | No       | T           | Yes      |
| G           | No       | Р           | No       |
| AZ          | Yes      | AT          | No       |
| ٧           | No       | W           | No       |
| С           | No       | R           | No       |
| D           | No       | AX          | Yes      |
| 0           | Yes      | AW          | Yes      |
| F           | Yes      | Ε           | No       |
| AY          | No       | AV          | No       |
| Z           | No       | Н           | No       |
| U           | No       | AP          | Yes      |
| N           | No       | K           | No       |
| AQ          | Yes      | AO          | No       |
|             |          |             |          |

Percent of institutions meeting criterion: 32.14

TABLE XLVII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 3

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | No       | Т           | Yes      |
| G           | No       | Р           | No       |
| AZ          | Yes      | AT          | No       |
| ٧           | No       | W           | Yes      |
| С           | No       | R           | Yes      |
| D           | No       | AX          | Yes      |
| 0           | No       | AW .        | Yes      |
| F           | No       | Ε           | Yes      |
| AY          | No       | AV          | Yes      |
| Z           | Yes      | Н           | No       |
| U           | Yes      | AP          | Yes      |
| N           | Yes      | K           | Yes      |
| AQ          | No       | AO          | Yes      |

Percent of institutions meeting criterion: 53.57

TABLE XLVIII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 4

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | Yes      | Τ           | Yes      |
| G           | Yes      | Р           | No       |
| AZ          | Yes      | AT          | No       |
| ٧           | No       | W           | Yes      |
| С           | No       | R           | Yes      |
| D           | No       | AX          | Yes      |
| 0           | Yes      | AW          | Yes      |
| F           | No       | Ε           | Yes      |
| AY          | No       | ΑV          | No       |
| Ζ :         | Yes      | Н           | No       |
| U           | Yes      | AP          | Yes      |
| N           | Yes      | K           | No       |
| AQ          | Yes      | AO          | Yes      |

Percent of institutions meeting criterion: 60.71

TABLE XLIX

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 5

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | Yes      | Т           | Yes      |
| G           | No       | Р           | No       |
| AZ          | Yes      | AT          | No       |
| ٧           | No       | W           | No       |
| С           | No       | R           | No       |
| D           | No       | АХ          | Yes      |
| 0           | No       | AW          | Yes      |
| F           | No       | Ε           | Yes      |
| AY          | No       | AV          | No       |
| Z           | No       | Н           | Yes      |
| U           | Yes      | AP          | Yes      |
| N           | Yes      | К           | Yes      |
| AQ          | No       | AO          | No       |
|             |          |             |          |

Percent of institutions meeting criterion: 42.86

TABLE L

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 6

| Institution     | Response           | Institution     | Response |
|-----------------|--------------------|-----------------|----------|
| А               | Yes                | В               | Yes      |
| Υ               | Yes                | T               | Yes      |
| G               | Yes                | P               | No       |
| AZ              | Yes                | AT              | Yes      |
| ٧               | Yes                | W               | Yes      |
| С               | Yes                | R               | Yes      |
| D               | Yes                | AX              | Yes      |
| 0               | Yes                | AW              | Yes      |
| F               | Yes                | Ε               | Yes      |
| AY              | Yes                | AV              | Yes      |
| Z               | Yes                | Н               | Yes      |
| U               | Yes                | АР              | Yes      |
| N               | Yes                | К               | Yes      |
| AQ              | Yes                | AO              | Yes      |
| Percent of inst | itutions meeting o | riterion: 96.43 |          |

TABLE LI

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 7

| Y       Yes       T         G       No       P         AZ       Yes       AT         V       No       W         C       No       R         D       Yes       AX         O       Yes       AW         F       No       E         AY       No       AV         Z       No       H | ponse |
|---|-------|
| G       No       P         AZ       Yes       AT         V       No       W         C       No       R         D       Yes       AX         O       Yes       AW         F       No       E         AY       No       AV         Z       No       H                             | Yes   |
| AZ       Yes       AT         V       No       W         C       No       R         D       Yes       AX         O       Yes       AW         F       No       E         AY       No       AV         Z       No       H  | No    |
| V       No       W         C       No       R         D       Yes       AX         0       Yes       AW         F       No       E         AY       No       AV         Z       No       H  | No    |
| C       No       R         D       Yes       AX         0       Yes       AW         F       No       E         AY       No       AV         Z       No       H   | No    |
| D       Yes       AX         0       Yes       AW         F       No       E         AY       No       AV         Z       No       H  | No    |
| O Yes AW  F No E  AY No AV  Z No H  | Yes   |
| F No E AY No AV Z No H  | Yes   |
| AY NO AV Z NO H   | Yes   |
| Z No H  | Yes   |
|   | Yes   |
|   | No    |
| U Yes AP  | Yes   |
| N Yes K   | No    |
| AQ Yes AO   | Yes   |

Percent of institutions meeting criterion: 57.14

TABLE LII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 8

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | No       | T           | No       |
| G           | No       | Р           | No       |
| AZ          | Yes      | AT          | No       |
| ٧           | No       | W           | No       |
| С           | No       | R           | No       |
| D           | No       | AX          | No       |
| 0           | Yes      | AW          | Yes      |
| F           | No       | E           | No       |
| AY          | No       | AV          | No       |
| Z           | Yes      | Н           | Yes      |
| U           | Yes      | AP          | No       |
| N           | No       | K           | No       |
| AQ          | No       | AO          | No       |
|             |          |             |          |

Percent of institutions meeting criterion: 25.00

TABLE LIII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 9

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| A           | Yes      | В           | No       |
| Υ           | No       | Т           | No       |
| G           | Yes      | Р           | No       |
| AZ          | Yes      | AT          | No       |
| ٧           | No       | W           | No       |
| С           | No       | R           | No       |
| D           | No       | AX          | Yes      |
| 0           | Yes      | AW          | No       |
| F           | No       | E           | Yes      |
| AY          | No       | AV          | No       |
| Z           | Yes      | Н           | Yes      |
| U           | Yes      | AP          | Yes      |
| N           | No       | К           | Yes      |
| AQ          | Yes      | AO          | Yes      |
|             |          |             |          |

Percent of institutions meeting criterion: 46.43

TABLE LIV

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 10

| nstitution | Response | Institution | Response |
|------------|----------|-------------|----------|
| А          | Yes      | В           | No       |
| Υ          | No       | T           | Yes      |
| G          | No       | Р           | No       |
| AZ         | No       | AT          | No       |
| ٧          | No       | W           | Yes      |
| С          | No       | R           | Yes      |
| D          | No       | AX          | Yes      |
| 0          | No       | AW          | Yes      |
| F          | No       | Ε           | Yes      |
| AY         | No       | AV          | No       |
| Z          | No       | Н           | Yes      |
| U          | Yes      | AP          | Yes      |
| N          | Yes      | K           | Yes      |
| AQ         | Yes      | AO          | Yes      |

Percent of institutions meeting criterion: 50.00

TABLE LV

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 11

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | No       | T           | Yes      |
| G           | No       | Р           | No       |
| AZ          | Yes      | AT          | No       |
| ٧           | No       | W           | Yes      |
| C           | No       | R           | Yes      |
| D           | Yes      | AX          | Yes      |
| 0           | No       | AW          | Yes      |
| F           | Yes      | E           | Yes      |
| AY          | No       | AV          | No       |
| Z           | Yes      | Н           | Yes      |
| U           | Yes      | AP          | No       |
| N           | Yes      | K           | No       |
| AQ          | Yes      | AO          | Yes      |
|             |          |             |          |

Percent of institutions meeting criterion: 57.14

TABLE LVI

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 12

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | Yes      | T           | Yes      |
| G           | Yes      | P           | No       |
| AZ          | Yes      | AT          | No       |
| V           | No       | W           | No       |
| С           | Yes      | R           | Yes      |
| 0           | No       | AX          | Yes      |
| 0           | Yes      | AW          | Yes      |
| F           | Yes      | Е           | Yes      |
| AY          | No       | AV          | Yes      |
| Z           | Yes      | Н           | Yes      |
| U           | Yes      | AP          | Yes      |
| N           | Yes      | К           | No       |
| AQ          | Yes      | AO          | Yes      |

Percent of institutions meeting criterion: 71.43

TABLE LVII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 13

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | No       | T           | Yes      |
| G           | Yes      | Р           | No       |
| AZ          | Yes      | АТ          | No       |
| ٧           | Yes      | W           | No       |
| С           | Yes      | R           | No       |
| D           | No       | AX          | Yes      |
| 0           | No       | AW          | Yes      |
| F           | Yes      | E           | Yes      |
| AY          | No       | AV          | Yes      |
| Z           | Yes      | Н           | Yes      |
| U           | Yes      | AP          | No       |
| N           | No       | K           | No       |
| AQ          | No       | AO          | Yes      |

Percent of institutions meeting criterion: 53.57

TABLE LVIII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 14

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | Yes      | T           | Yes      |
| G           | No       | Р           | No       |
| AZ          | Yes      | AT          | No       |
| ٧           | Yes      | W           | No       |
| С           | Yes      | R           | Yes      |
| D           | No       | AX          | Yes      |
| 0           | No       | AW          | Yes      |
| F           | Yes      | E           | Yes      |
| AY          | No       | AV          | Yes      |
| Z           | Yes      | Н           | No       |
| U           | Yes      | AP          | No       |
| N           | No       | K           | No       |
| AQ          | No       | AO          | Yes      |

Percent of institutions meeting criterion: 53.57

TABLE LIX

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 15

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | No       | T           | Yes      |
| G           | No       | Р           | No       |
| AZ          | No       | AT          | No       |
| ٨           | No       | W           | No       |
| С           | No       | R           | No       |
| D           | No       | AX          | Yes      |
| 0           | Yes      | AW          | Yes      |
| F           | No       | Ε           | No       |
| AY          | No       | AV          | No       |
| Z           | Yes      | Н           | No       |
| U           | Yes      | AP          | No       |
| N           | No       | K           | No       |
| AQ          | No       | AO          | No       |
|             |          |             |          |

Percent of institutions meeting criterion: 25.00

TABLE LX

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 16

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | No       | T           | Yes      |
| G           | No       | Р           | No       |
| AZ          | Yes      | AT          | No       |
| ٧           | No       | W           | No       |
| С           | No       | R           | Yes      |
| D           | No       | AX          | No       |
| 0           | No       | AW          | No       |
| F           | No       | Ε           | No       |
| AY          | No       | AV          | No       |
| Z           | No       | Н           | No       |
| U           | Yes      | AP          | No       |
| N           | No       | K           | No       |
| AQ          | No       | AO          | No       |
|             |          |             |          |

Percent of institutions meeting criterion: 17.86

TABLE LXI

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 17

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| Α           | Yes      | В           | No       |
| Υ           | No       | T           | No       |
| G           | No       | Р           | No       |
| AZ          | Yes      | AT          | No       |
| ٧           | No       | W           | No       |
| C           | No       | R           | Yes      |
| D           | No       | AX          | No       |
| 0           | Yes      | AW          | Yes      |
| F           | No       | E           | Yes      |
| AY          | No       | AV          | No       |
| Z           | No       | Н           | No       |
| U           | No       | AP          | No       |
| N           | No       | К           | Yes      |
| AQ          | No       | AO          | No       |
|             |          |             |          |

Percent of institutions meeting criterion: 25.00

TABLE LXII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 18

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | No       | В           | No       |
| Y           | No       | T           | Yes      |
| G           | No       | Р           | No       |
| AZ          | No       | AT          | No       |
| V           | No       | W           | No       |
| С           | No       | R           | No       |
| D           | No       | AX          | No       |
| 0           | No       | AW          | No       |
| F           | Yes      | E           | No       |
| AY          | No       | AV          | No       |
| Z           | No       | Н           | No       |
| U           | No       | AP          | No       |
| N           | No       | K           | No       |
| AQ          | No       | AO          | Yes      |

Percent of institutions meeting criterion: 10.71

TABLE LXIII

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 19

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Y           | No       | Т           | No       |
| G           | No       | Р           | No       |
| AZ          | No       | AT          | No       |
| V           | No       | W           | Yes      |
| С           | No       | R           | No       |
| D           | No       | AX          | No       |
| 0           | Yes      | AW          | No       |
| F           | Yes      | E           | No       |
| AY          | No       | AV          | No       |
| Z           | Yes      | Н           | No       |
| U           | Yes      | AP          | Yes      |
| N           | No       | К           | No       |
| AQ          | No       | AO          | No       |

Percent of institutions meeting criterion: 25.00

TABLE LXIV

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 20

| A Yes B Y No T G No P AZ Yes AT | No  |
|---------------------------------|-----|
| G No P                          |     |
|                                 | Yes |
| AZ Yes AT                       | No  |
|                                 | No  |
| V No W                          | No  |
| C No R                          | Yes |
| D No AX                         | Yes |
| O Yes AW                        | Yes |
| F No E                          | Yes |
| AY Yes AV                       | No  |
| Z Yes H                         | No  |
| U No AP                         | No  |
| N No K                          | No  |
| AQ Yes AO                       | No  |

Percent of institutions meeting criterion: 39.29

TABLE LXV

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 21

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | Yes      | T           | Yes      |
| G           | Yes      | Р           | No       |
| AZ          | No       | AT          | No       |
| V           | No       | W           | Yes      |
| С           | Yes      | R           | Yes      |
| D           | Yes      | AX          | Yes      |
| 0           | Yes      | AW          | Yes      |
| F           | Yes      | E           | Yes      |
| AY          | No       | AV          | No       |
| Z           | Yes      | Н           | Yes      |
| U           | No       | AP          | Yes      |
| N           | Yes      | K           | No       |
| AQ          | Yes      | AO          | Yes      |
|             |          |             |          |

Percent of institutions meeting criterion: 67.86

TABLE LXVI

INSTITUTIONAL RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 22

| Institution | Response | Institution | Response |
|-------------|----------|-------------|----------|
| А           | Yes      | В           | No       |
| Υ           | No       | T           | Yes      |
| G           | No       | P           | No       |
| AZ          | No       | AT          | No       |
| ٧           | No       | W           | No       |
| С           | No       | R           | No       |
| D           | Мо       | AX          | Yes      |
| 0           | No       | AW          | Yes      |
| F           | Yes      | E           | Yes      |
| AY          | No       | AV          | No       |
| Z           | Yes      | Н           | No       |
| U           | Yes      | AP          | No       |
| N           | No       | K           | No       |
| AQ          | No       | AO          | No       |

Percent of institutions meeting criterion: 28.57

TABLE LXVII

## PANEL OF EXPERTS EVALUATION OF RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 23

| Institution | Responses | Institution | Response |
|-------------|-----------|-------------|----------|
| A           | No        | В           | Yes      |
| Υ           |           |             |          |
|             | Yes       | T           | Yes      |
| G           | No        | Р           | No       |
| AZ          | Yes       | AT          | No       |
| ٧           | No        | W           | Yes      |
| C           | No        | R           | Yes      |
| D           | No        | AX          | *        |
| 0           | Yes       | AW          | Yes      |
| F           | No        | E           | No       |
| AY          | No        | AV          | No       |
| Z           | Yes       | Н           | No       |
| U           | Yes       | AP          | No**     |
| N           | No        | K           | No       |
| AQ          | No        | AO          | No       |
|             |           |             |          |

Percent of institutions meeting criterion: 37.04

<sup>\*</sup>This item was not rated due to inconclusive evaluation by the panel of experts; i.e., two panel members had affirmative responses, two had negative responses, and the fifth member abstained from rating the item.

<sup>\*\*</sup>Institution AP's completed questionnaire was received after the panel of experts evaluated this item; therefore, this item was evaluated as to whether the deductible clause was in the 1/10 of 1% to 1% range of the annual operating budget.

### APPENDIX J

RESPONSES TO INDIVIDUAL RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION BY INSTITUTIONAL CATEGORY

TABLE LXVIII

# RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 1 BY INSTITUTIONAL CATEGORY

| esponses | Responses   | Meeting Criterion |
|----------|-------------|-------------------|
| 6        | 2           | 75.00             |
| 6        | 4           | 60.00             |
| 9        | 1           | 90.00             |
|          | 6<br>6<br>9 | 6 2<br>6 4<br>9 1 |

TABLE LXIX

### RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 2 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 3                          | 5                         | 37.50  |
| 11                        | 3                          | 7                         | 30.00  |
| III                       | 3                          | 7                         | 30.00  |
| Percent of all            | institutions me            | eting criterion           | : 32.14                                      |

TABLE LXX RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 3 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 2                          | 6                         | 25.00  |
| II                        | 4                          | 6                         | 40.00  |
| III                       | 9                          | 1                         | 90.00  |

TABLE LXXI RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 4 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 5                          | 3                         | 62.50  |
| II                        | 5                          | 5                         | 50.00  |
| III                       | 7                          | 3                         | 70.00  |
| •••                       | institutions me            | eting criterion           |  |

TABLE LXXII

RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 5 BY INSTITUTIONAL CATEGORY

| Category | Responses | Responses | Meeting Criterion |
|----------|-----------|-----------|-------------------|
| I        | 3         | 5         | 37.50             |
| 11       | 3         | 7         | 30.00             |
| III      | 6         | 4         | 60.00             |

TABLE LXXIII

RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE
CRITERION NUMBER 6 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 8                          | 0                         | 100.00                                       |
| II                        | 9                          | 1                         | 90.00  |
| III                       | 10                         | 0                         | 100.00                                       |
| Percent of all            | institutions me            | eting criterion:          | 96.43  |
|                           |                            |                           |  |

TABLE LXXIV

RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 7 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 5                          | 3                         | 62.50  |
| 11                        | 4                          | 6                         | 40.00  |
| III                       | 7                          | 3                         | 70.00  |
| Percent of all            | institutions med           | eting criterion           | : 57.14                                      |

TABLE LXXV

RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 8 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 3                          | 5                         | 37.50  |
| 11                        | 2                          | 8                         | 20.00  |
| III                       | 2                          | 8                         | 20.00  |
| Percent of all            | institutions med           | etina criterion           | 25.00  |

TABLE LXXVI

# RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 9 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 4                          | 4                         | 50.00  |
| II                        | 3                          | 7                         | 30.00  |
| III                       | 6                          | 4                         | 60.00  |

#### TABLE LXXVII

## RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER TO BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 1                          | 7                         | 12.50  |
| 11                        | 4                          | 6                         | 40.00  |
| III                       | 9                          | 1                         | 90.00  |
| Percent of all            | institutions mee           | eting criterion:          | 50.00  |

TABLE LXXVIII

## RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 11 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 3                          | 5                         | 37.50  |
| II                        | 6                          | 4                         | 60.00  |
| III                       | 7                          | 3                         | 70.00  |
| Percent of all            | institutions mee           | eting criterion:          | 57.14  |

TABLE LXXIX

# RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 12 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 6                          | 2                         | 75.00  |
| II                        | 6                          | 4                         | 60.00  |
| III                       | 8                          | 2                         | 80.00  |
| Percent of all            | institutions med           | eting criterion:          | 71.43  |

TABLE LXXX

RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 13 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 5                          | 3                         | 62.50  |
| II                        | 4                          | 6                         | 40.00  |
| III                       | 6                          | 4                         | 60.00  |

TABLE LXXXI

RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 14 BY INSTITUTIONAL CATEGORY

| Institutional Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|------------------------|----------------------------|---------------------------|--|
| I                      | 5                          | 3                         | 62.50  |
| 11                     | 4                          | 6                         | 40.00  |
| III                    | 6                          | 4                         | 60.00  |
| Percent of all         | institutions me            | eting criterion           | : 53.57                                      |

TABLE LXXXII

### RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 15 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 2                          | 6                         | 25.00  |
| II                        | 3                          | 7                         | 30.00  |
| III                       | 2                          | 8                         | 20.00  |

Percent of all institutions meeting criterion: 25.00

TABLE LXXXIII

#### RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 16 BY INSTITUTIONAL CATEGORY

| Institutional Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|------------------------|----------------------------|---------------------------|--|
| I                      | 2                          | 6                         | 25.00  |
| II                     | 2                          | 8                         | 20.00  |
| III                    | 1                          | 9                         | 10.00  |
| III                    | 1 institutions mea         | 8<br>9                    | 10.00  |

TABLE LXXXIV

## RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 17 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses |   | Institutions<br>Criterion |
|---------------------------|----------------------------|---------------------------|---|---------------------------|
| I                         | 3                          | 5                         | 3 | 7.50                      |
| II                        | 0                          | 10                        |   | .00                       |
| III                       | 4                          | 6                         | 4 | 0.00                      |
|                           | 4 institutions mea         | 6<br>eting criterion      |   | 0.00                      |

TABLE LXXXV

## RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 18 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 0                          | 8                         | .00  |
| II                        | 2                          | 8                         | 20.00  |
| III                       | 1                          | 9                         | 10.00  |

TABLE LXXXVI

## RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 19 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses |       |
|---------------------------|----------------------------|---------------------------|-------|
| I                         | 2                          | 6                         | 25.00 |
| II                        | 3                          | 7                         | 30.00 |
| III                       | 2                          | 9                         | 20.00 |
| Percent of ins            | titutions meeting          | g criterion: 2            | 5.00  |

TABLE LXXXVII

### RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 20 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 3                          | 5                         | 37.50  |
| 11                        | 4                          | 6                         | 40.00  |
| III                       | 4                          | 6                         | 40.00  |

Percent of institutions meeting criterion: 39.29

TABLE LXXXVIII

## RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 21 BY INSTITUTIONAL CATEGORY

| Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|----------------------------|---------------------------|--|
| 6                          | 2                         | 75.00  |
| 5                          | 5                         | 50.00  |
| 8                          | 2                         | 80.00  |
|                            |                           |  |

Percent of all institutions meeting criterion: 67.86

TABLE LXXXIX

## RESPONSES TO RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 22 BY INSTITUTIONAL CATEGORY

| 12.50 |
|-------|
| 40.00 |
| 30.00 |
|       |

TABLE XC

PANEL OF EXPERTS EVALUATION OF RISK MANAGEMENT AND PROPERTY INSURANCE CRITERION NUMBER 23 BY INSTITUTIONAL CATEGORY

| Institutional<br>Category | Number of Yes<br>Responses | Number of No<br>Responses | Percent of Institutions<br>Meeting Criterion |
|---------------------------|----------------------------|---------------------------|--|
| I                         | 3                          | 5                         | 37.50  |
| 11                        | 4                          | 6                         | 40.00  |
| III*                      | 3                          | 6                         | 33.33  |
| Percent of all            | institutions med           | eting criterion:          | 37.04  |

<sup>\*</sup>Nine rather than ten institutions were evaluated due to inconclusive evaluation by panel of experts on institution AX; i.e., two panel members had affirmative responses, two had negative responses, and the fifth member abstained from rating the institution.

#### APPENDIX K

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES FOR THOSE INSTITUTIONS PROVIDING DATA COVERING TWO OR MORE YEARS

TABLE XCI

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION H

| Year   | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|--------|-------------------------------|-------------------|---------------------|
| 1975   | \$17,087                      | 0                 | 0                   |
| 1974   | 17,000                        | 0                 | 0                   |
| 1973   | 19,000                        | 0                 | 0                   |
| 1972   | 18,875                        | 0                 | 0                   |
| 1971   | 18,850                        | 0                 | 0                   |
| 1970   | 18,800                        | 0                 | 0                   |
| 1969   | 18,750                        | 0                 | 0                   |
| 1968   | 18,700                        | 0                 | 0                   |
| 1967   | 18,650                        | 0                 | 0                   |
| 1966   | 18,595                        | 0                 | _ 0                 |
| Totals | \$184,307                     | 0                 | 0                   |

TABLE XCII COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION AX

| Year        | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|-------------|-------------------------------|-------------------|---------------------|
| 1975        | \$18,032                      | \$ 1,146          | \$ 128              |
| 1974        | 3,893                         | 0                 | 0                   |
| 1973        | 5,907                         | 0                 | 0                   |
| 1972        | 5,872                         | 8,097             | 900                 |
| 1971        | 5,873                         | 0                 | 0                   |
| 1970        | 3,897                         | 0                 | 0                   |
| 1969        | 3,300                         | 0                 | 0                   |
| 1968        | 6,421                         | 21,575            | 2,397               |
| 1967        | 5,008                         | 0                 | 0                   |
| 1966        | 3,972                         | 0                 | 0                   |
| Totals      | \$62,175                      | \$30,818          | \$3,425             |
| Insured Los | s/Premium Patio: 49 57%       |                   |                     |

Insured Loss/Premium Ratio: 49.57%

TABLE XCIII

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION Z

| Year         | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|--------------|-------------------------------|-------------------|---------------------|
| 1975         | \$16,000.                     | 0                 | 0                   |
| 1974         | 15,008.                       | 0                 | 0                   |
| 1973         | 13,890.                       | 0                 | 0                   |
| 1972         | 13,086.                       | 0                 | 0                   |
| 1971         | (data unavailable for th      | is year)          |                     |
| 1970         | 12,102.                       | 0                 | 0                   |
| 1969         | 9,187.                        | 0                 | 0                   |
| Totals       | \$79,273.                     | 0                 | 0                   |
| Insured Loss | /Premium Ratios: 0            |                   |                     |

TABLE XCIV

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION AP

| Year        | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|-------------|-------------------------------|-------------------|---------------------|
| 1975        | \$35,183.                     | \$308.            | *                   |
| 1974        | 28,611.                       | 99.               | *                   |
| 1973        | 26,362.                       | 4,785.            | *                   |
| 1972        | 26,098.                       | 31,445.           | *                   |
| 1971        | 21,999.                       | <u>1,573.</u>     | *                   |
| Totals      | \$138,253.                    | \$38,210.         |                     |
| Insured Los | ss/Premium Ratio: 27.64%      |                   |                     |

\*Data not available.

TABLE XCV COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION AQ

| Year        | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|-------------|-------------------------------|-------------------|---------------------|
| 1975        | \$9,000.                      | 0                 | 0                   |
| 1974        | 8,582.                        | 0                 | 0                   |
| 1973        | 8,086.                        | \$4,121.          | 0                   |
| 1972        | 8,272.                        | 5,127.            | 0                   |
| 1971        | 8,001.                        | 0                 | 0                   |
| Totals      | \$41,941.                     | \$9,248.          | 0                   |
| Insured Los | ss/Premium Ratio: 22.05%      |                   |                     |

TABLE XCVI

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION T

| Year       | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|------------|-------------------------------|-------------------|---------------------|
| 1975       | \$5,268.                      | 0                 | 0                   |
| 1974       | 3,803.                        | 0                 | 0                   |
| 1973       | 3,115.                        | 0                 | 0                   |
| 1972       | 2,803.                        | 0                 | 0                   |
| Totals     | \$14,989.                     | 0                 | 0                   |
| Insured Lo | ss/Premium Ratio: O           |                   |                     |

TABLE XCVII

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION D

| Year   | Property Insurance<br>Premium_ | Insured<br>Losses | Uninsured<br>Losses |
|--------|--------------------------------|-------------------|---------------------|
| 1975   | \$5,756.                       | 0                 | 0                   |
| 1974   | 4,445.                         | 0                 | 0                   |
| 1973   | 4,445.                         | 0                 | 0                   |
| 1972   | 4,445.                         | 0                 | 0                   |
| Totals | \$19,091.                      | 0                 | 0                   |
| Totals | \$19,091.                      | 0                 |                     |

Insured Loss/Premium Ratio: 0

TABLE XCVIII

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION AZ

| Year        | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|-------------|-------------------------------|-------------------|---------------------|
| 1975        | \$16,924.                     | 0                 | 0                   |
| 1974        | 17,585.                       | 0                 | 0                   |
| 1973        | 15,316.                       | 0                 | 0                   |
| 1972        | 13,094.                       | 0                 | 0                   |
| Totals      | \$62,919.                     | 0                 | 0                   |
| Insured Los | ss/Premium Ratio: O           |                   |                     |

TABLE XCIX

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION B

| Year   | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|--------|-------------------------------|-------------------|---------------------|
| 1975   | \$19,445.                     | 0                 | 0                   |
| 1974   | 20,394.                       | 0                 | 0                   |
| 1973   | 22,244.                       | 0                 | 0                   |
| 1972   | 22,360.                       | \$1,000,000.      | 0                   |
| Totals | \$84,443.                     | \$1,000,000.      | 0                   |
|        |                               |                   |                     |

Insured Loss/Premium Ratio: 1184.23%

TABLE C

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION E

| Property Insurance<br>Premium | Insured<br>Losses  | Uninsured<br>Losses  |
|-------------------------------|--|--|
| \$48,753.                     | 0  | 0  |
| 39,444.                       | 0  | 0  |
| 45,230.                       | \$2,107,438.   | 0  |
| \$133,427.                    | \$2,107,438.   | 0  |
|                               | Property Insurance<br>Premium<br>\$48,753.<br>39,444.<br>45,230. | Property Insurance         Insured Losses           \$48,753.         0           39,444.         0           45,230.         \$2,107,438. |

Insured Loss/Premium Ratio: 1,579.47%

TABLE CI

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION Y

| Year          | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|---------------|-------------------------------|-------------------|---------------------|
| 1975          | \$1,500.                      | 0                 | \$300.              |
| 1974          | 1,500.                        | 0                 | 0                   |
| Totals        | \$3,000.                      | 0                 | \$300.              |
| Insured Loss/ | Premium Ratio: O              |                   |                     |

TABLE CII

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION V

| Year       | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|------------|-------------------------------|-------------------|---------------------|
| 1975       | \$3,509.                      | \$150.            | \$100.              |
| 1974       | 2,051.                        | 500.              | 100.                |
| Total      | \$5,560.                      | \$650.            | \$200.              |
| Insured Lo | ss/Premium Ratio: 11.69%      |                   |                     |

TABLE CIII

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION AO

| Year   | Property Insurance<br>Premium | Insured<br>Losses | Uninsured<br>Losses |
|--------|-------------------------------|-------------------|---------------------|
| 1975   | \$87,628.                     | 0                 | 0                   |
| 1974   | 77,701.                       | 0                 | 0                   |
| 1973   | 69,728.                       | 0                 | 0                   |
| Totals | \$235,057.                    | 0                 | 0                   |

TABLE CIV

COMPARISON OF PROPERTY INSURANCE PREMIUMS AND LOSS EXPERIENCES OF INSTITUTION R

| Year        | Property Insurance<br>Premiums | Insured<br>Losses | Uninsured<br>Losses |
|-------------|--------------------------------|-------------------|---------------------|
| 1975        | \$27,626.                      | 0                 | 0                   |
| 1974        | 35,832.                        | \$14,560.         | \$24,760.           |
| Totals      | \$63,458.                      | \$14,560.         | \$24,760.           |
| Insured Los | s/Premium Ratio: 22.94%        |                   |                     |

#### APPENDIX L

VALUE OF THE FACILITIES AND CONTENTS OWNED BY TENNESSEE'S PRIVATE COLLEGES AND UNIVERSITIES - 1975

TABLE CV

VALUE OF THE FACILITIES AND CONTENTS OWNED BY TENNESSEE'S PRIVATE COLLEGES AND UNIVERSITIES - 1975

| Institution | Facilities     | Contents      | Total         |
|-------------|----------------|---------------|---------------|
| А           | \$745,716.     | \$143,000.    | \$888,716     |
| Υ           | 2,219,000.     | 222,000.      | 2,441,000     |
| AZ          | 2,024,896.     | 377,187.      | 2,402,083     |
| С           | 3,423,309      | 589,377.      | 4,012,686     |
| F           | 10,606,000.    | 1,178,000.    | 11,784,000    |
| Z           | 7,992,860.     | 1,619,819.    | 9,612,679     |
| U           | 3,989,394.     | 552,418.      | 4,514,812     |
| N           | 4,300,000.     | 450,000.      | 4,750,000     |
| AQ          | 4,045,000.     | 602,000.      | 4,647,000     |
| В           | 11,343,600.    | 910,200.      | 12,253,800    |
| T           | 4,889,800.     | 741,900.      | 5,631,700     |
| Р           | 8,650,493.     | 1,414,424.    | 10,064,917    |
| AT          | 6,214,725.     | 1,045,967.    | 7,260,692     |
| W           | 14,417,000.    | 1,971,390.    | 16,442,390    |
| R           | 4,550,095.     | 902,654.      | 5,452,749     |
| AX          | 3,437,742.     | 1,514,173.    | 4,951,915     |
| Ε           | 25,093,117.    | 2,154,556.    | 27,247,673    |
| AV          | 28,389,158.    | 1,140,650.    | 29,529,808    |
| Н           | 16,165,625.    | 805,500.      | 16,971,125    |
| AP          | 30,155,000.    | 2,462,600.    | 32,617,600    |
| AO          | 127,206,960.   | 26,281,050.   | 153,488.010   |
| Totals      | \$319,913,490. | \$47,078,865. | \$366,992,355 |

Bob Paul Lilly was born in Bluff City, Tennessee, on January 10, 1939, one of four children of Mr. and Mrs. Richard Albert Lilly. He attended the public schools of Sullivan County, Tennessee, graduating from Bluff City High School in 1956. The following fall he entered East Tennessee State University and graduated with a B. S. degree in Business Administration in 1960.

In November 1961 he entered the United States Air Force and was commissioned a second lieutenant in February, 1962. During his first military assignment he attended Middle Tennessee State University, as a part-time student, and received his M. A. degree in Educational Administration and Supervision in 1964. Subsequent military assignments took him to Alaska, South Carolina and Texas.

In July of 1972 he was appointed Assistant Professor of Aerospace Studies at the University of Tennessee, Knoxville, a position held until June 1975. During the spring quarter of 1973 he entered the University of Tennessee, Knoxville as a part-time student. In June of 1975 he was selected for full-time graduate study under Air Force sponsorship. He was admitted to candidacy in January of 1976 and received the Doctor of Education degree in Educational Administration and Supervision in June, 1977.

He is a member of Phi Delta Kappa and Phi Kappa Phi. He is married to the former Elizabeth N. Johnson and they have a son, Stephen.